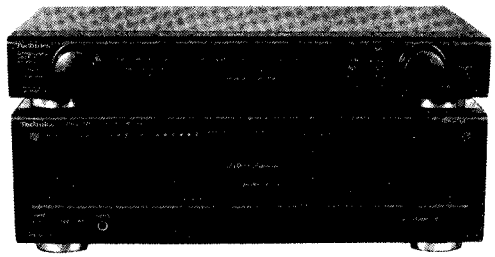
ORDER NO. AD9506165C2

Service Manual

Power Amplifier Amplifier

SE-A800S

SU-C800U



SE-A800S

Remote Control Transmitter

Colour

(K) : Black

Areas

Suffix for Model No.	Area	Colour
(E)	Europe	(K)
(EB)	Britain	
(EG)	Germany and Italy	

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

System: SU-A800D

Control amplifier	**SU-C800U**
Power amplifier	**SE-A800S**

Specifications (DIN 45 500)

20 Hz – 20 kHz continuous power output	
both channels driven	2 × 55 W (8 Ω)
1 kHz continuous power output	
both channels driven (THD: 1%)	2 × 70 W (8 Ω)
	2 × 100 W (4 Ω)
63 Hz – 12.5 kHz continuous power output	
both channels driven (THD: 0.7%)	2 × 65 W (8 Ω)
	2 × 85 W (4 Ω)
Total harmonic distortion	
rated power at 20 Hz – 20 kHz	0.01% (8 Ω)
Intermodulation distortion	
(50 Hz: 7 kHz = 4:1, SMPTE)	0.007% (8 Ω)
Residual hum and noise	0.3 mV
Damping factor	70 (8 Ω)
	35 (4 Ω)
Headphones output level/impedance	540 mV/330 Ω (Ø 6.3)
Load impedance	
A or B, BI-WIRING	4 Ω – 16 Ω
A and B	8 Ω – 16 Ω
Input sensitivity/impedance	1 V/33 kΩ
S/N (rated power, 4 Ω)	95 dB (110 dB, IHF '66)
Frequency response	5 Hz – 70 kHz (+0, – 3 dB)
	+0 dB, – 0.5 dB (20 Hz – 20 kHz)

■ **GENERAL**

Power consumption	230 W
Power supply	
For (E) and (EG) areas	50 Hz/60 Hz AC, 230 V
For (EB) area	50 Hz/60 Hz AC, 230 V – 240 V
Dimensions (W × H × D)	430 × 136 × 348 mm
Weight	8.7 kg

Notes:

1. Design and specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

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Before Repair

1) Turn off the power supply. Using a 10 Ω, 10 W resistor, connect both ends of power supply capacitors (C701, C702) in order to discharge the voltage.
2) Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230 V/240 V.

Power supply voltage	AC 230 V	AC 240 V
Consumed current 50 Hz	100 ~ 200 mA	100 ~ 200 mA

Protection Circuitry

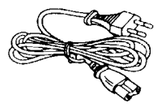
he protection circuitry may have operated if either of the following conditions is noticed:
- No sound is heard when the power is switched ON.
- Sound stops during a performance.

he function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are shorted", or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.
this occurs, follow the procedure outlined below:
1. Switch OFF the power.
2. Determine the cause of the cause of the problem and correct it.
3. Switch ON the power once again.

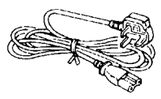
ote:
/hen the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

Accessories

AC power supply cord
(E, EG) areas : (RJA0019-2K) 1



(EB) area : (VJA0733) 1



- Stereo connection cable
(SJP2276) 1

Amplifier connection cable
(RJL6D001B10) 1

- Remote control transmitter
(RAK-SU180WH) 1

- Batteries
(UM-4, "AAA", R03) 2
Note: These are available on sales route.

Caution for AC Mains Lead

[(EB) area code model only]

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5-ampere fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local dealer.

CAUTION!
IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFETY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

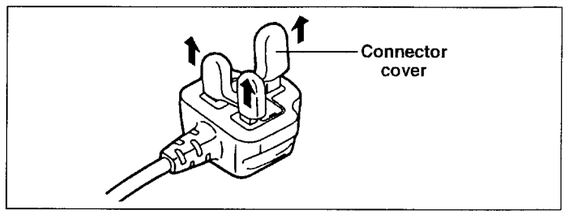
This apparatus was produced to BS 800.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or the Earth Symbol ⏚ .

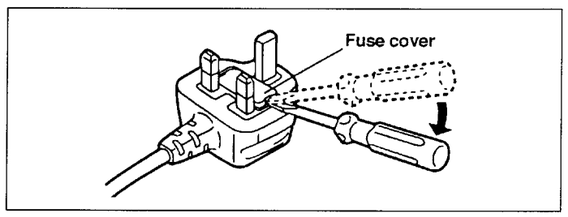
Before use

Removal the connector cover as follows.

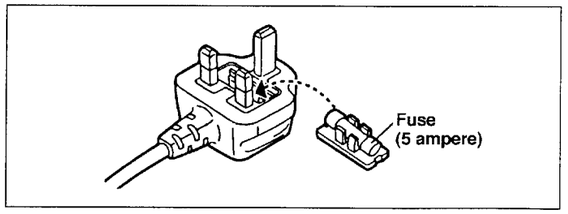


How to replace the fuse

1. Remove the fuse cover with a screwdriver.



2. Replace the fuse and attach the fuse cover.



■ Connecting the Audio Components

Make sure that the power supply for all components has been turned off before making any connections.

Stereo connection cable

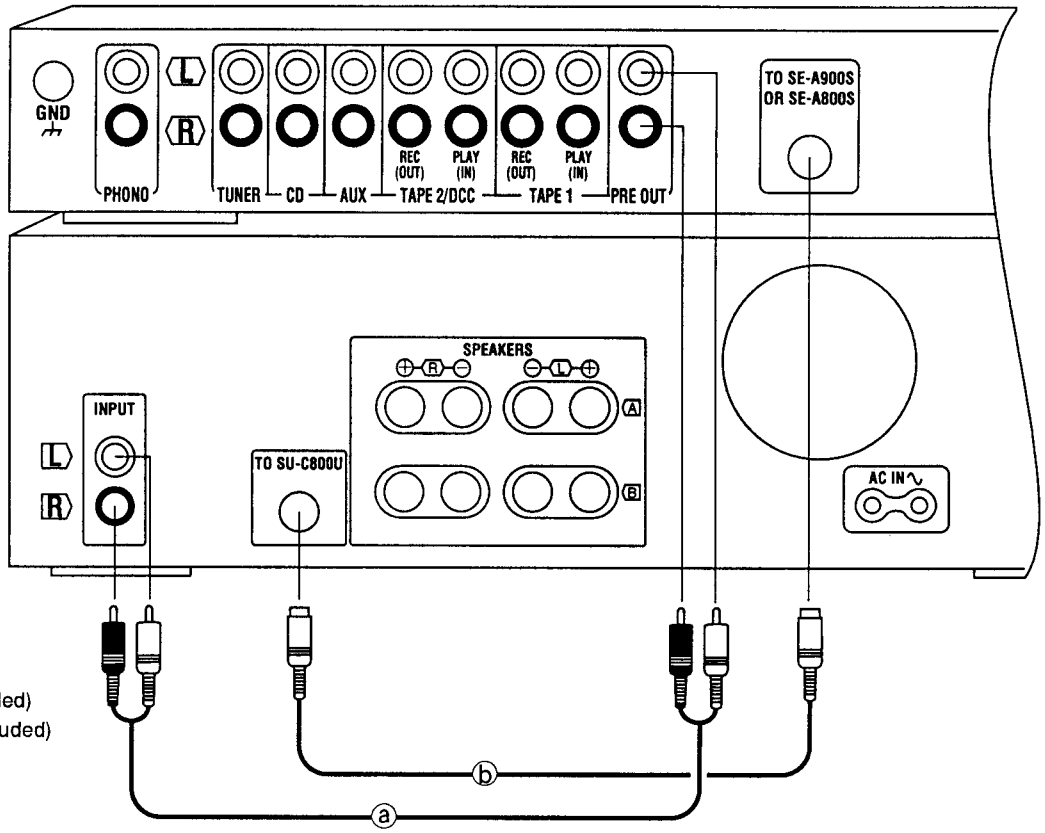
White (L)
Red (R)

If connecting a graphic equalizer A
Connect it between the PRE OUT terminals of the control amplifier and INPUT terminals of the power amplifier.

1

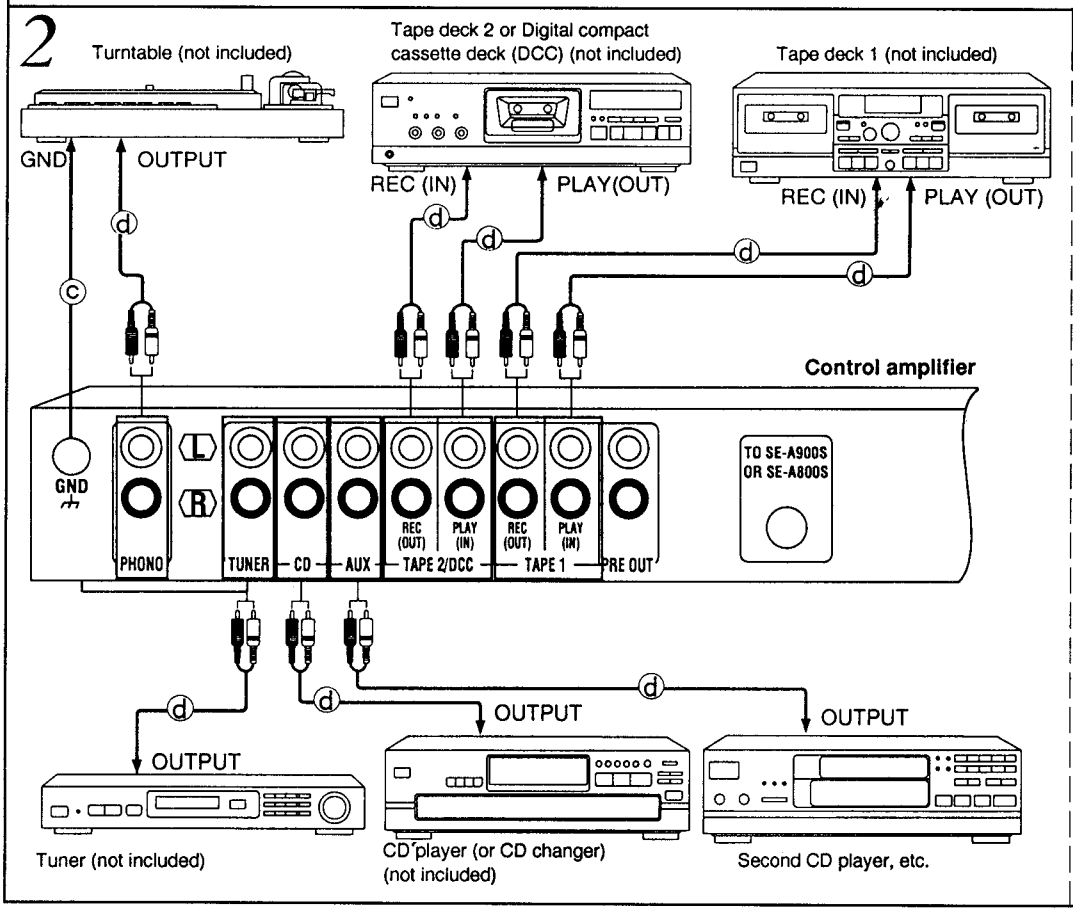
Control amplifier

Power amplifier

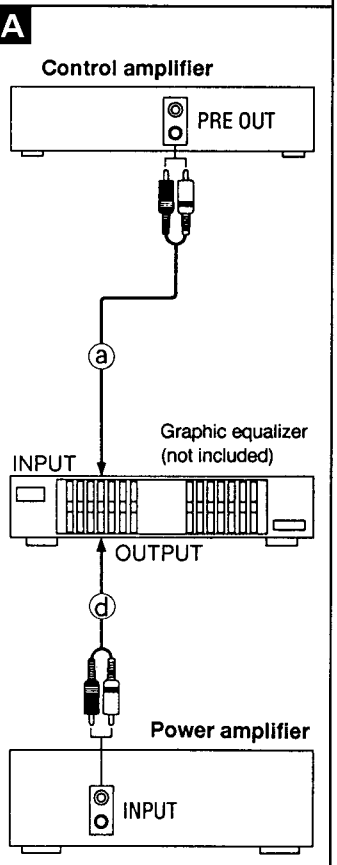


ⓐ Stereo connection cable (included)
ⓑ Amplifier connection cable (included)
ⓒ Ground wire (not included)
ⓓ Stereo connection cables (not included)

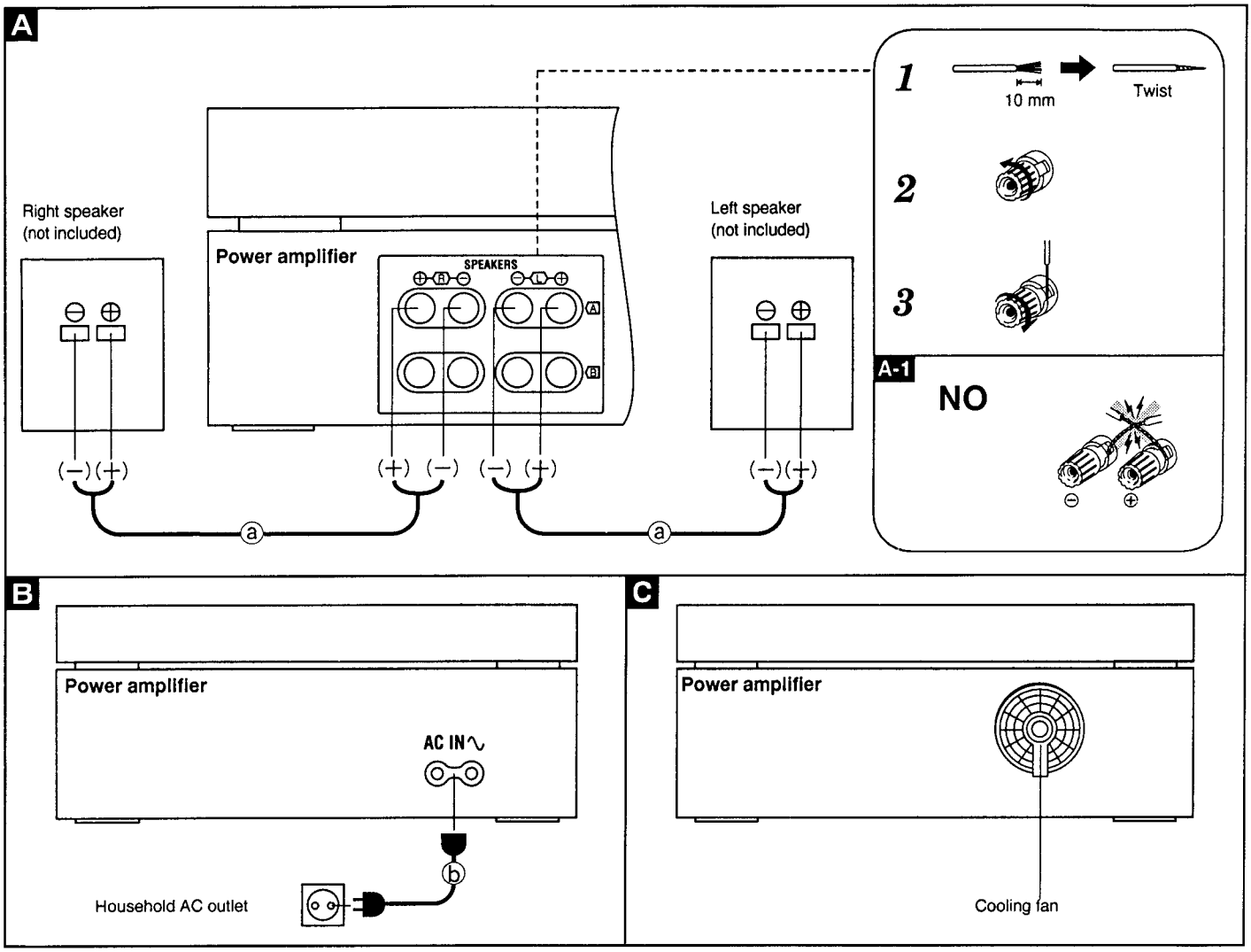
2



A



■ Connecting the Speakers and Power Supply



Connecting the speakers A

ⓐ Speaker cables (not included)
The wires which are connected to the positive (+) terminals of the amplifier should be connected to the positive (+) terminals of the speakers. The negative (–) terminals should be connected in a similar way.

"B" terminals

For connection to a second pair of speakers.

Speaker impedance

- When only the "A" or only the "B" terminals are used: 4–16 Ω
- When both the "A" and the "B" terminals are used simultaneousy: 8–16Ω

CAUTION A-1

To prevent damage to circuitry, never short-circuit the positive (+) and negative (–) speaker wires.

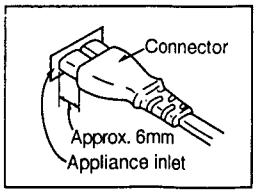
Connecting the power supply B

Connect the power supply only after all other connections have been made.

ⓑ AC power supply cord (included)

Insertion of Connector

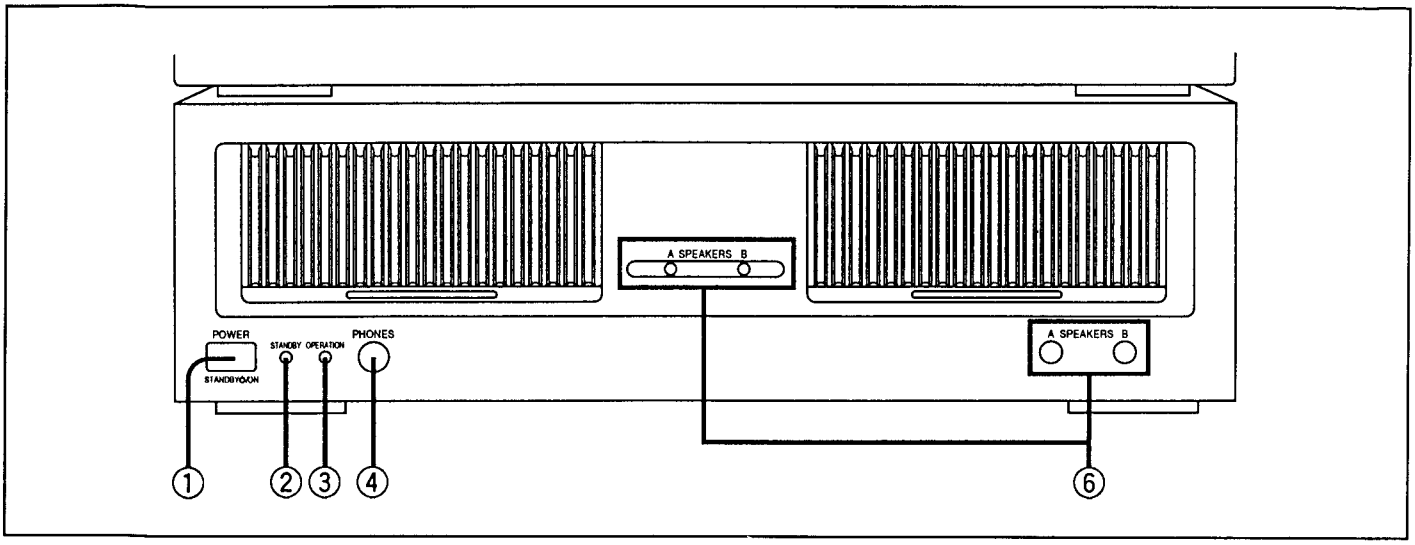
Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.



Cooling fan C

The cooling fan operates at high power output levels only.

■ Front Panel Controls



Power amplifier

① Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

Note

This switch will not operate when the control amplifier is in standby mode.

② "STANDBY" indicator (STANDBY)

When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

③ Operation indicator (OPERATION)

This indicator illuminates when the power amplifier is in the normal operating condition.

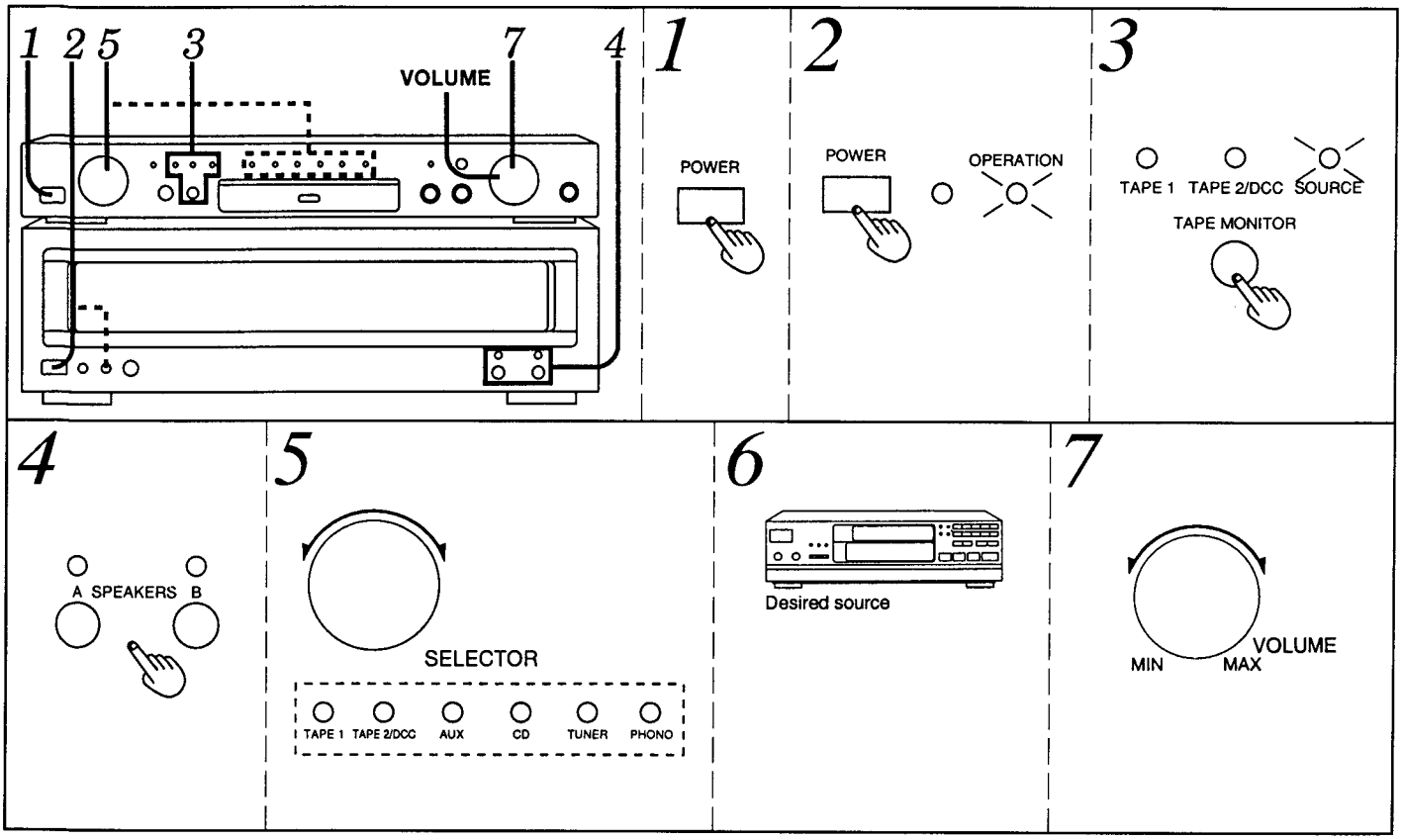
If the (+) and (–) wires of the speaker cables are shorted, or if a circuit abnormality such as DC voltage in the power output to the speakers is detected, the protection circuit will operate and the "OPERATION" indicator will turn off.

④ Headphones jack (PHONES)

⑥ Speaker select buttons/indicators (SPEAKERS)

(ϕ 6.3, 330 Ω)

■ Listening to Sound



Before operation, set VOLUME to the "MIN" position.

1 **Press POWER of the control amplifier.**

2 **Press POWER of the power amplifier.**
The "OPERATION" indicator will illuminate after approximately 4 seconds.
Once the power amplifier has been turned on, both amplifiers can then be turned on or to standby mode using POWER on the control amplifier.

3 **Press TAPE MONITOR so that the "SOURCE" indicator illuminates.**
Each time the button is pressed, the indication will change as follows.
TAPE 1 → TAPE 2/DCC → SOURCE

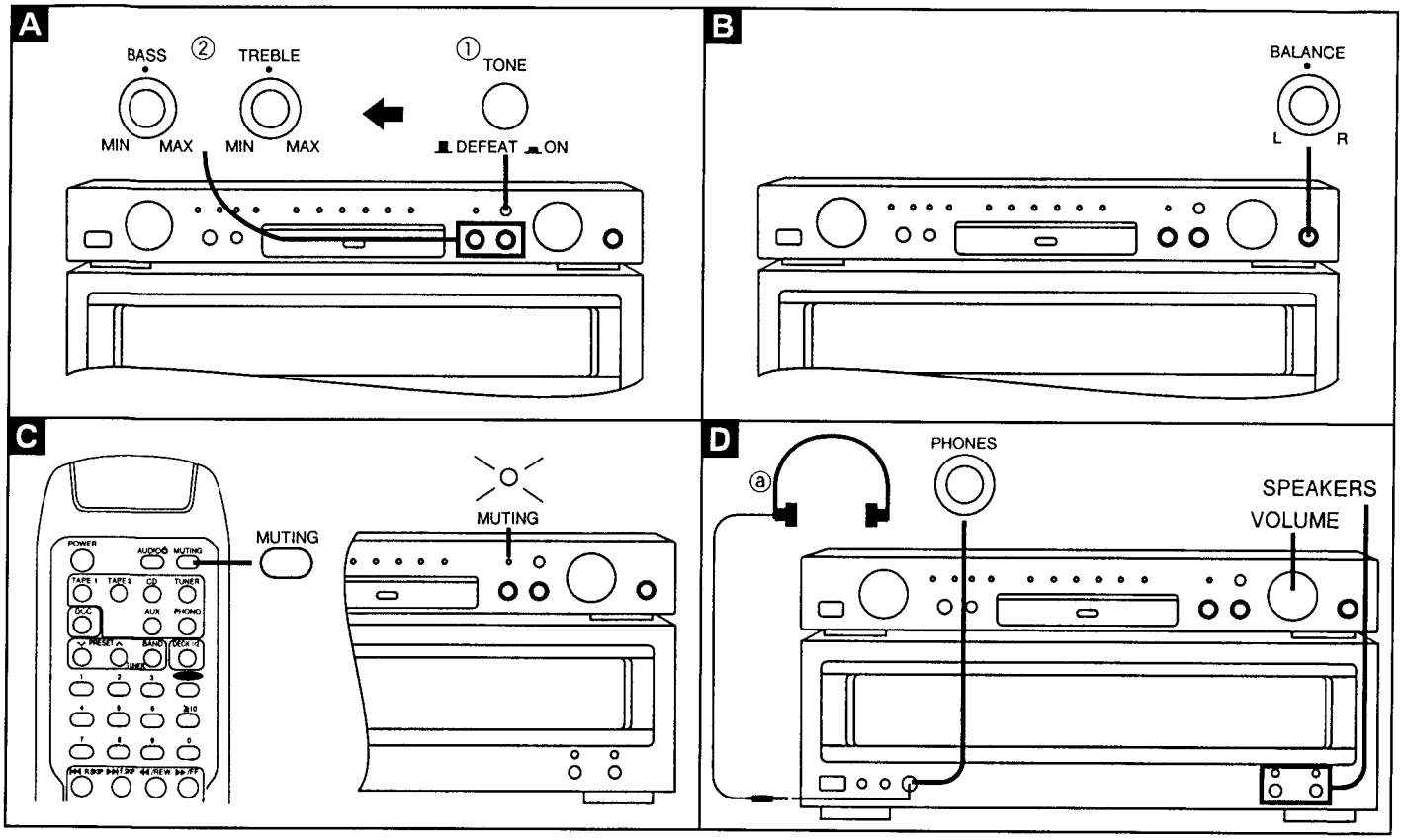
4 **Press A and/or B to select the speaker system(s) to be used.**
The corresponding indicator(s) will illuminate.

5 **Turn SELECTOR to select the desired source.**
The indicator which corresponds to the selected input source will illuminate.
TAPE 1: Tape deck 1
TAPE 2/DCC: Tape deck 2 or DCC
AUX: Component connected to the AUX terminals
CD: CD player (or CD changer)
TUNER: Tuner
PHONO: Turntable

6 **Start the desired source.**
(Refer to the appropriate operating instructions for details.)

7 **Turn VOLUME to adjust the volume level.**

After listening is finished
Be sure to reduce the volume level, and turn off the units by pressing POWER of the control amplifier.



To adjust the tone quality A

① Press TONE in to the "⎓ ON" position.

② Turn BASS to adjust the low-frequency sound.
Turn TREBLE to adjust the high-frequency sound.

If listening without adjusting the tone quality, press TONE so that it is at the "⎓ DEFEAT" position.

To adjust the sound balance B

Turn BALANCE to adjust the left/right sound balance.

To mute the sound level C

Press MUTING on the remote control transmitter.
(The "MUTING" indicator on the amplifier will illuminate.)

Press once again to return to the previous volume level. (The "MUTING" indicator will turn off.)

To listen through headphones D

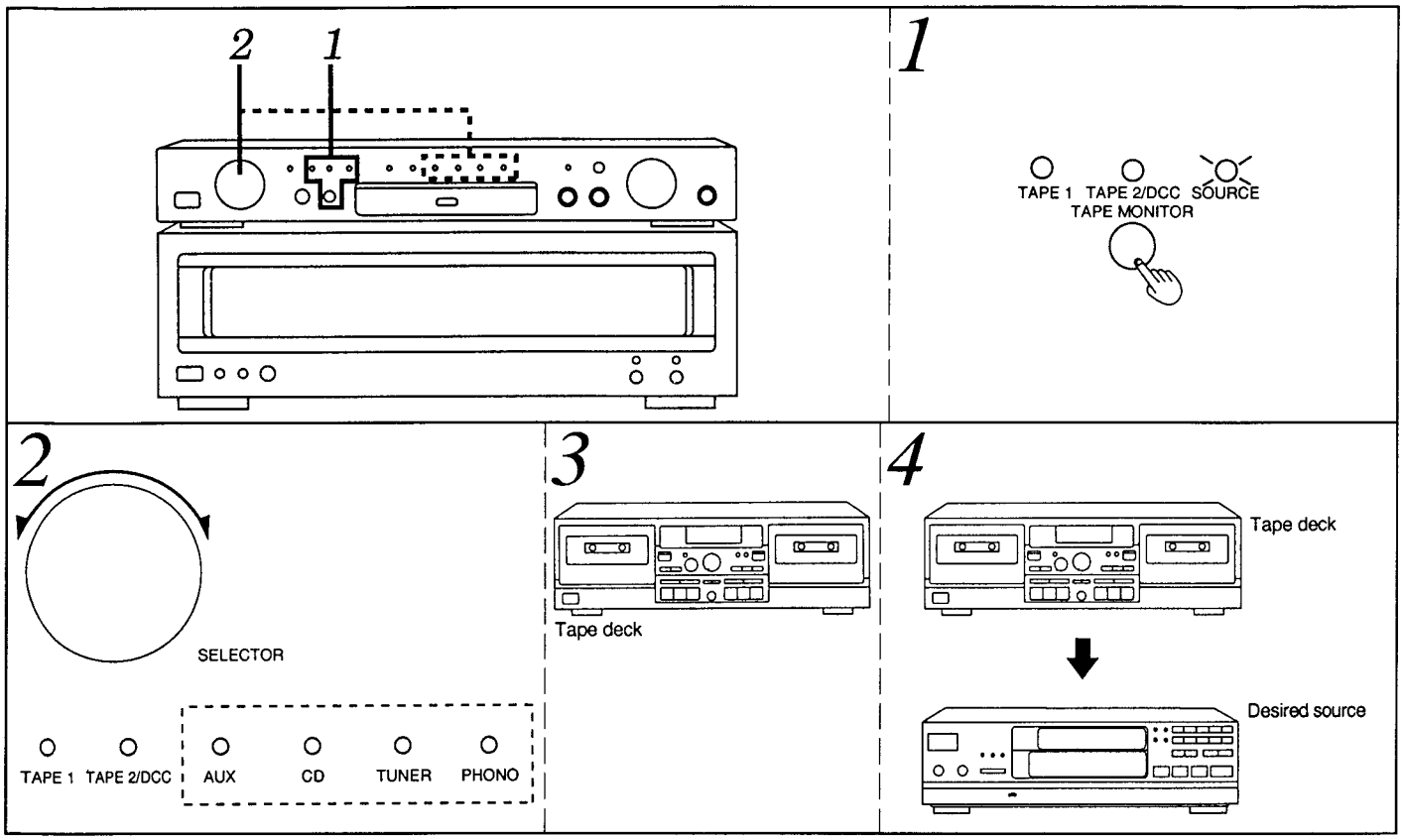
Use VOLUME to reduce the volume level, and connect the headphones.

ⓐ Headphones (not included)
Plug type: 6.3 mm phone plug stereo type

If sound from speakers is not wanted, press SPEAKERS (A) and/or (B) to turn off the speaker indicators.

Note
Avoid listening for prolonged periods of time to prevent hearing damage.

■ Recording



It is possible to record from units which are connected to the rear "AUX", "CD", "TUNER" or "PHONO" terminals to cassette tape decks or DCC decks which are connected to the "TAPE 1" or "TAPE 2/DCC" terminals.

1 Press TAPE MONITOR so that the "SOURCE" indicator illuminates.

2 Turn SELECTOR to select the desired source to be recorded.
AUX: Component connected to the AUX terminals
CD: CD player (or CD changer)
TUNER: Tuner
PHONO: Turntable

3 Prepare the tape deck for recording.
Refer to the operating instructions for the tape deck for detailed adjustment of the recording level, etc.

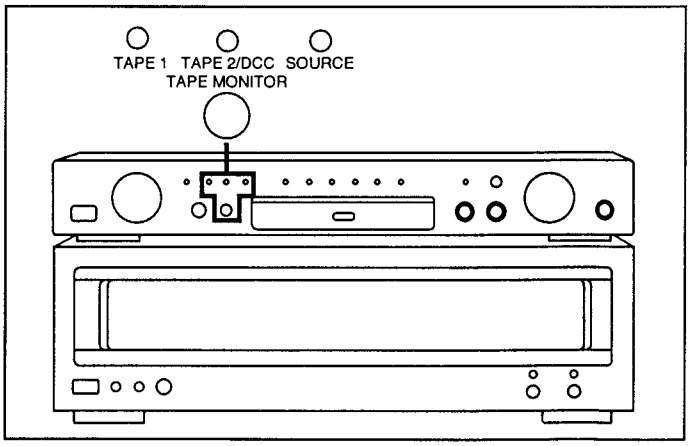
4 Start the tape deck for recording, and play the source.

Recording from tape to tape

It is possible to record from tape deck 1 to tape deck 2 (or DCC) and vice versa.

To record from tape deck 1 to 2
1. Press TAPE MONITOR so that the "SOURCE" indicator illuminates.
2. Turn SELECTOR so that the "TAPE 1" indicator illuminates.
3. Begin tape deck 2 for recording and tape deck 1 for playback.

To record from tape deck 2 to 1
1. Press TAPE MONITOR so that the "SOURCE" indicator illuminates.
2. Turn SELECTOR so that the "TAPE 2/DCC" indicator illuminates.
3. Begin tape deck 1 for recording and tape deck 2 for playback.



To check the sound recorded while recording is being made

If a cassette tape deck with 3 heads is connected to the "TAPE 1" or "TAPE 2/DCC" terminals, it is possible to check the sound being recorded onto the tape.

Press TAPE MONITOR to select the deck (tape deck 1 or 2) and set the monitor switch on the tape deck to "TAPE".

TAPE 1: when recording on tape deck 1
TAPE 2/DCC: when recording on tape deck 2

Note
Be sure to switch the illuminated tape monitor indicator back to "SOURCE" once you have finished monitoring the sound being recorded.

■ Operation Check and Main Component Replacement Procedures

NOTE

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.
4. Illustrated screws are equivalent to actual size.
5. Refer the parts No. on the page of "Main Component Replacement Procedures", if necessary.

• Contents

•Checking Procedure for each P.C.B. Page.

1.Checking for the main P.C.B.. ..... 10,11.

•Main Component Replacement Procedures

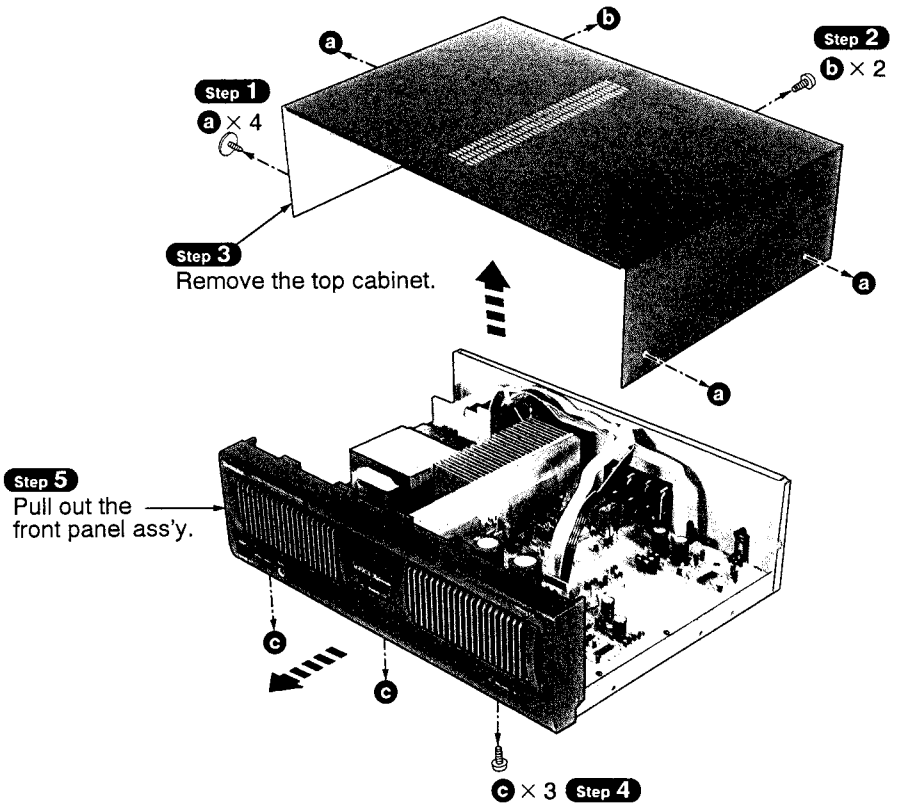
1.Replacement for the foot. ..... 12.

2.Replacement for the power IC and regulator transistor. ..... 12,13.

3.Replacement for the fan motor. ..... 13.

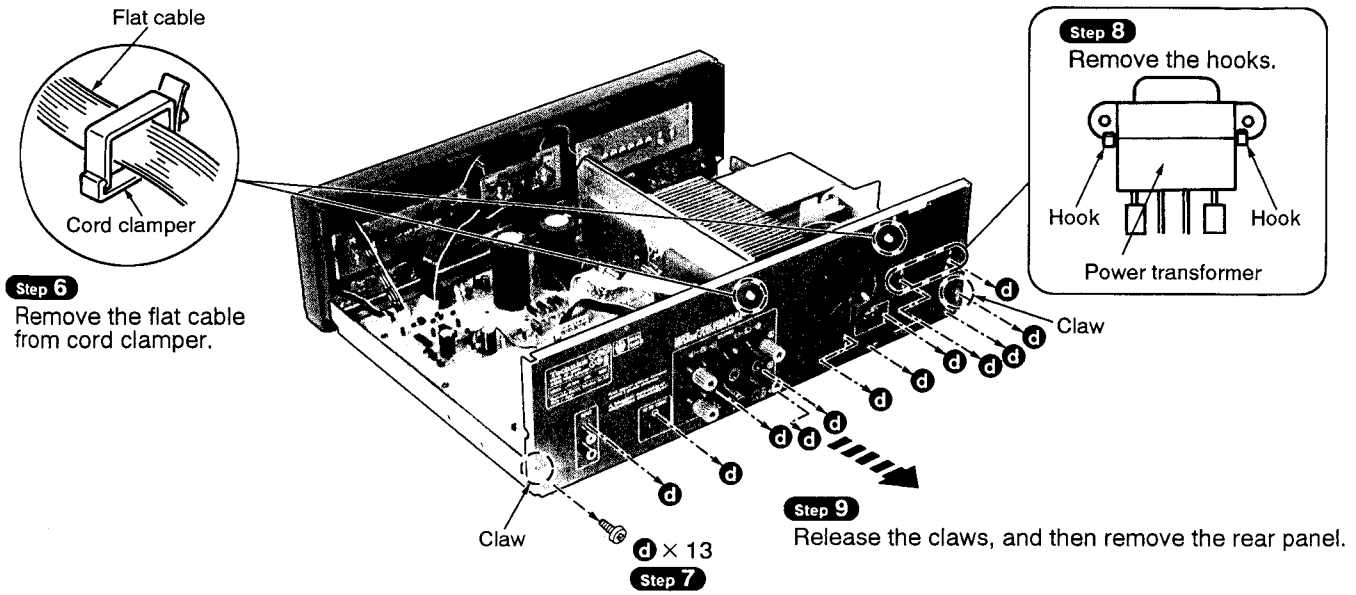
■ Checking Procedure for each P.C.B.

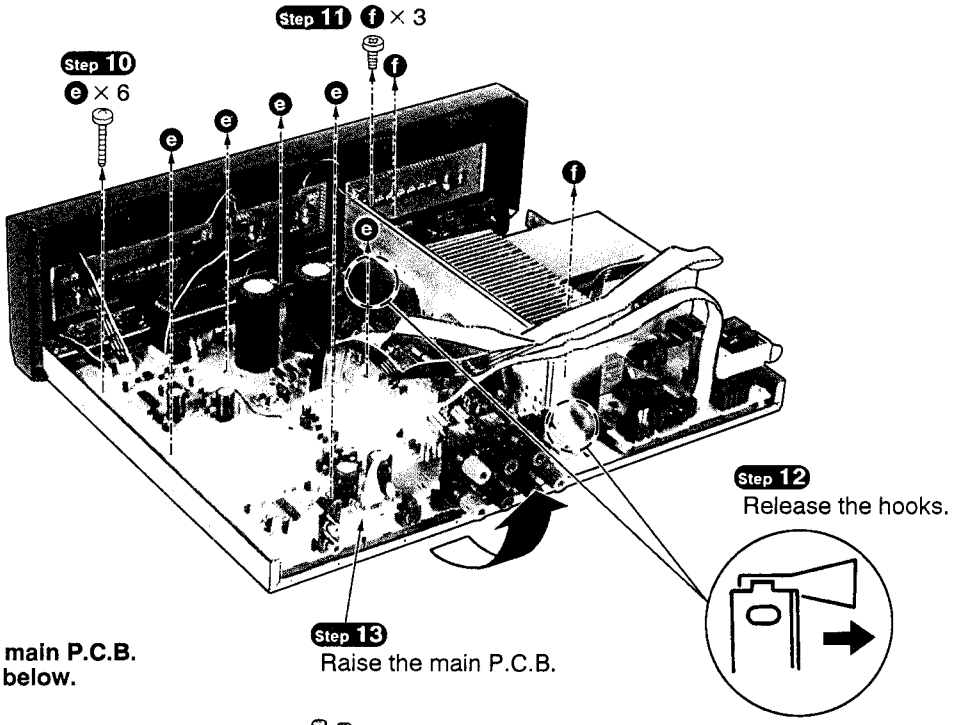
1. Checking for the main P.C.B.



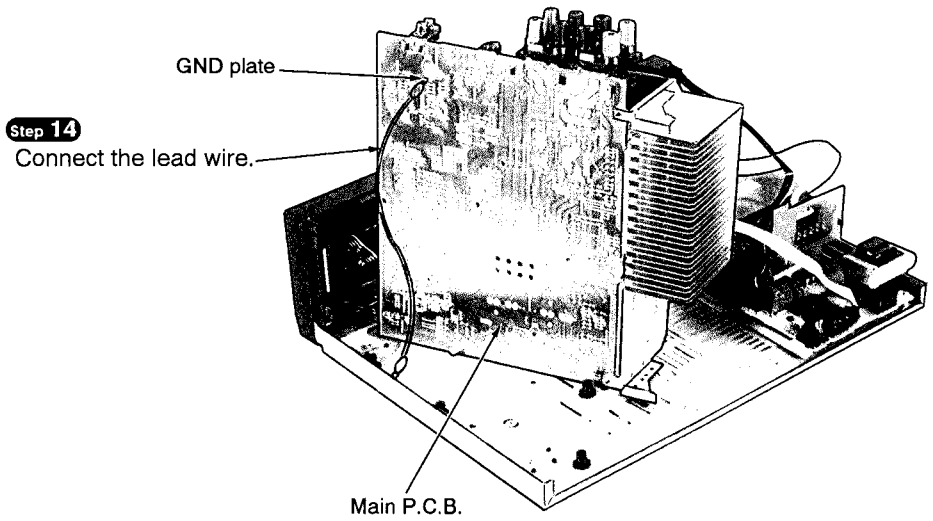
ⓐ
[SNE2129-1] (Black)

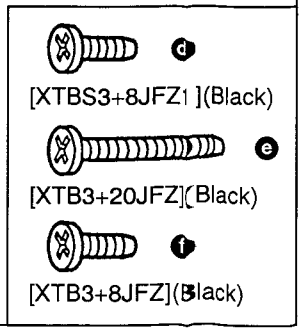
ⓑ, ⓒ
[XTBS3+8JFZ1] (Black)





• **Check the main P.C.B. as shown below.**

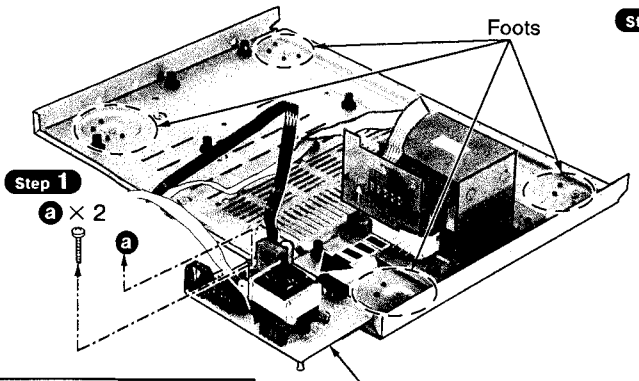




■ Main Component Replacement Procedures

1. Replacement for the foot

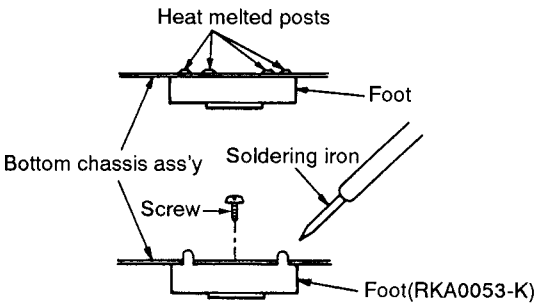
• Follow the Step 1 ~ Step12 in item 1 on checking procedure for each P.C.B. on pages 10 and 11.



Step 2 Remove the power supply P.C.B.

Step 3 Remove the 4 heat melted posts on the bottom chassis ass'y with a pair of nippers or similar tool.

Step 4 To replace the foot(RKA0053-K) on the bottom chassis ass'y melt the 4 posts with a soldering iron or install it with a screw (XTB3+6J)

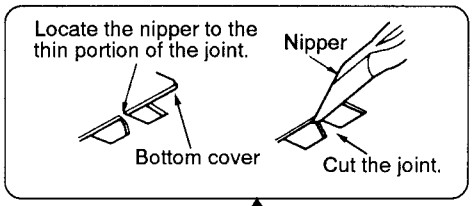


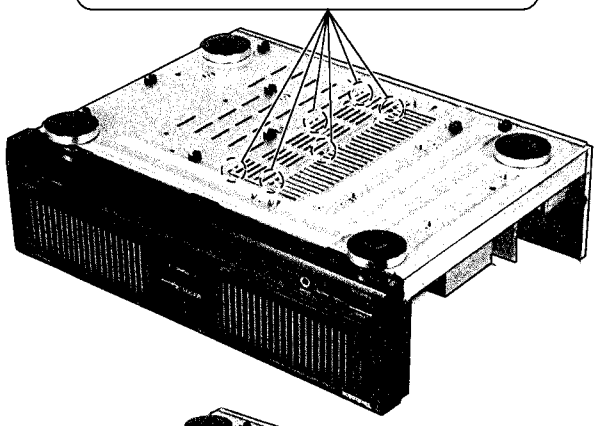
[XTB3+20JFZ](Black)

2. Replacement for the power IC and regulator transistor

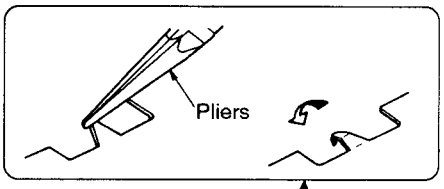
• Follow the Step 1 ~ Step 3 in item 1 on checking procedure for each P.C.B. on page 10.

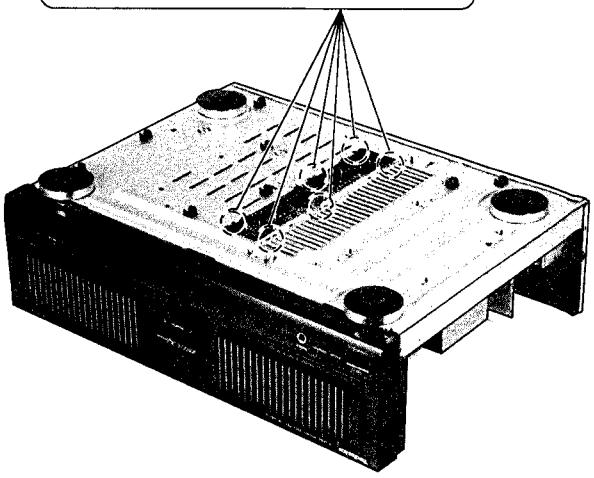
Step 1 Cut the joints as shown below.(6 portions)

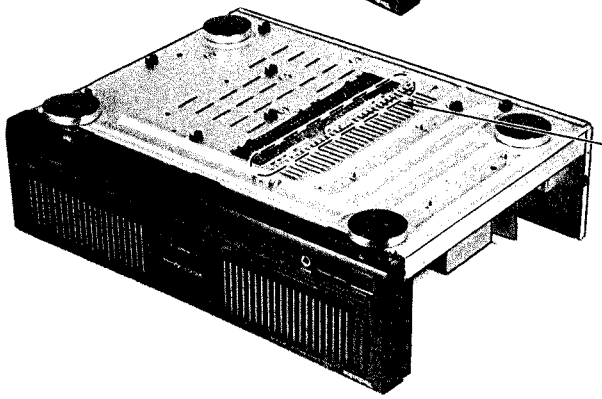




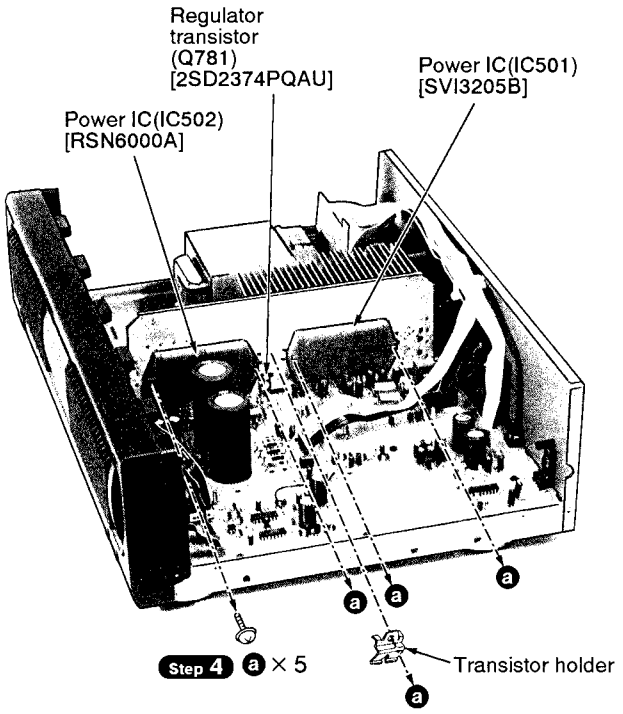
Step 2 Fold the joints.(6 portions)



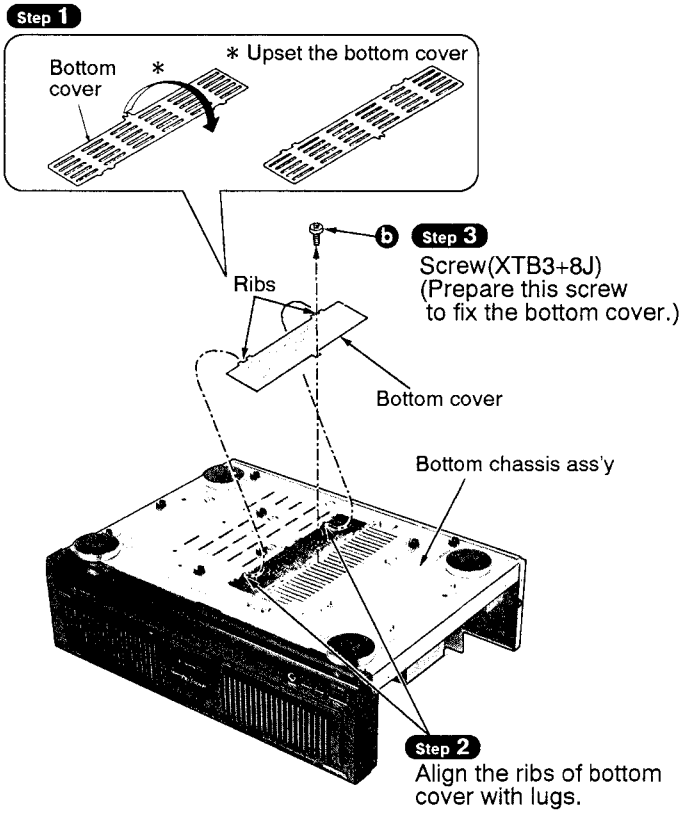




Step 3 Unsolder the terminals of power IC and regulator transistor.

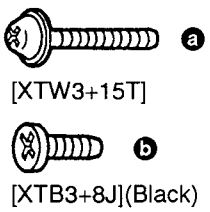


Installation of the bottom cover after replacement



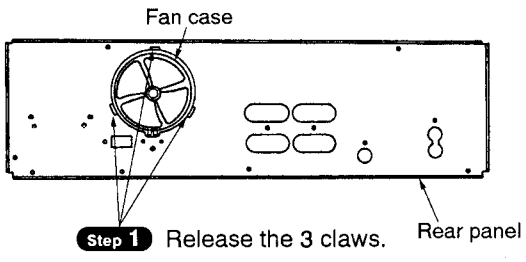
CAUTION

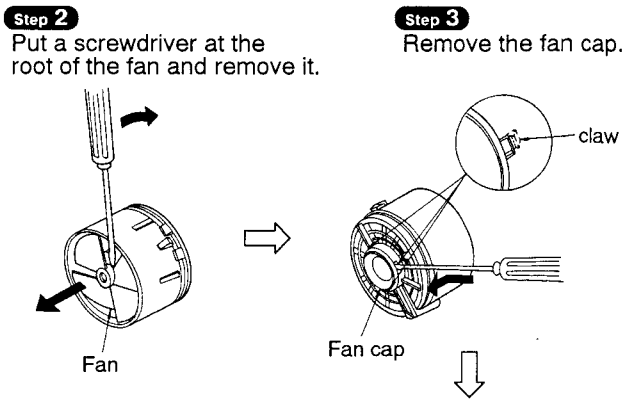
1. After replceing the power IC or regulator transistor,apply a sufficient quantity of compound grease (RFKX0002) between the heat sink and the power IC or regulator transistor (Radiation of power IC).
2. Tighten enough the screws (ⓐ) after replacing the power IC and regulator transisitor. Otherwise, the heat rabiation works little.



3. Replacement for the fan motor

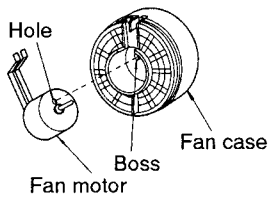
- Follow the Step 1 ~ Step 9 in item 1 on checking procedure for each P.C.B. on pages 10 and 11.

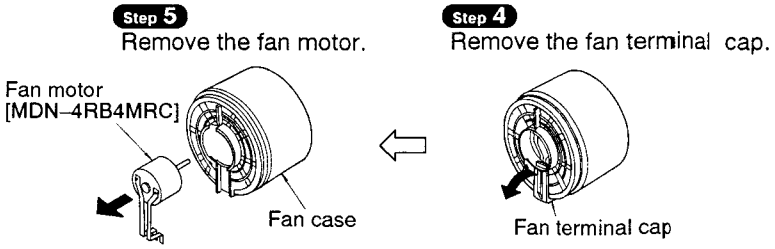




NOTE

When replacing the fan motor, align the boss of the fan case with the hole of the fan motor.





■ Schematic Diagram

		Page
A	MAIN CIRCUIT	15~18
B	S.P. SWITCH CIRCUIT	18
C	HEADPHONES JACK CIRCUIT	18
D	POWER SWITCH CIRCUIT	18
E	LED (SP) CIRCUIT	18
F	LED (R ch) CIRCUIT	18
G	LED (L ch) CIRCUIT	18
H	POWER SUPPLY CIRCUIT	18
I	POWER TRANSFORMER CIRCUIT	18

- **This schematic diagram may be modified at any time with the development of new technology.**

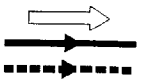
Notes:

- **S801** : Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)
- **S802** : Speaker select switch (SPEAKER A)
- **S803** : Speaker select switch (SPEAKER B)

- Voltage values and waveforms are measured as indicated in the schematic diagram when test points between **TP701** and **TP701**, and between **TP703** and **TP704** are shorted.

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
  No mark: Power ON

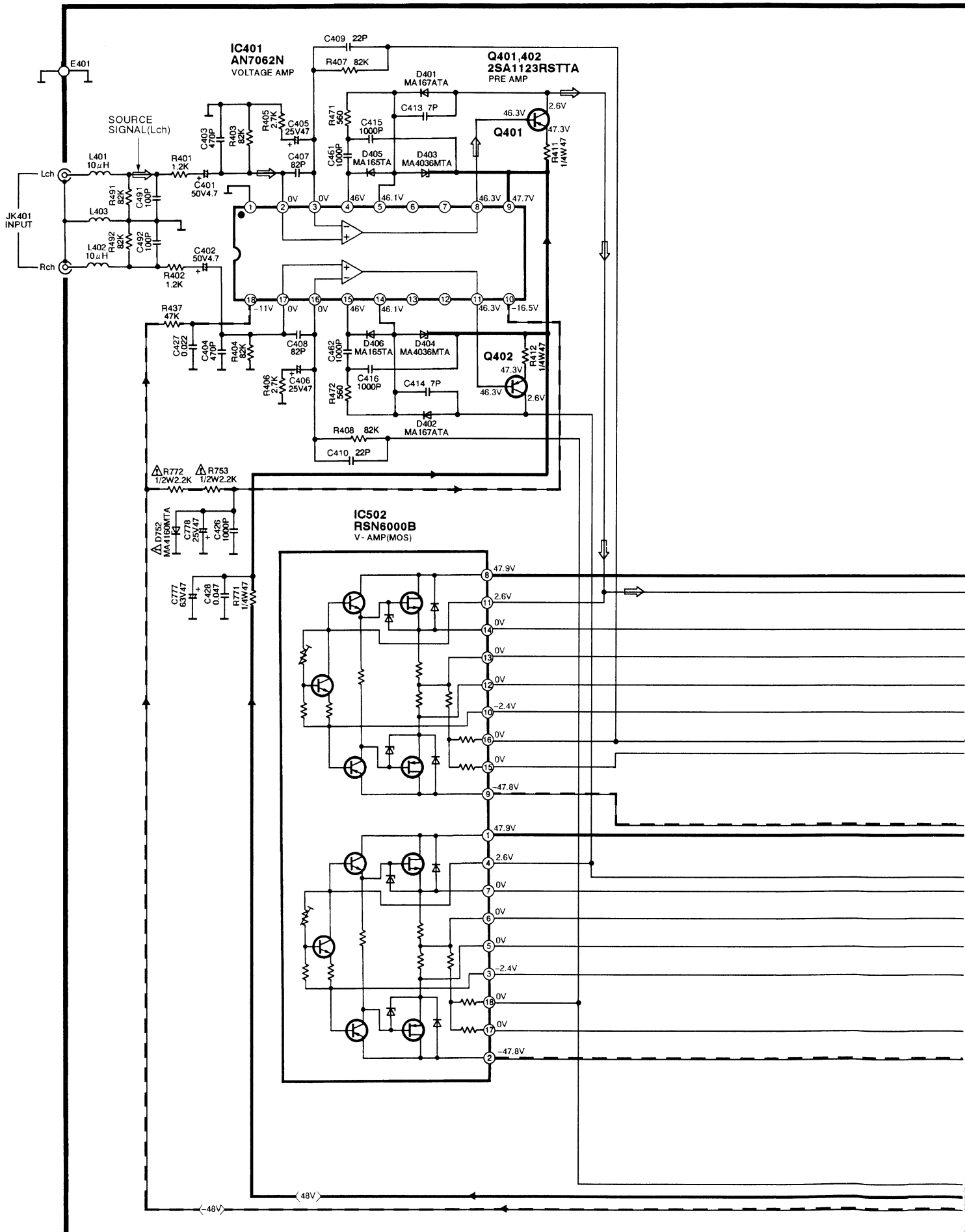
- Voltage and signal line


: Source Signal Line
: Positive Voltage Line
: Negative Voltage Line

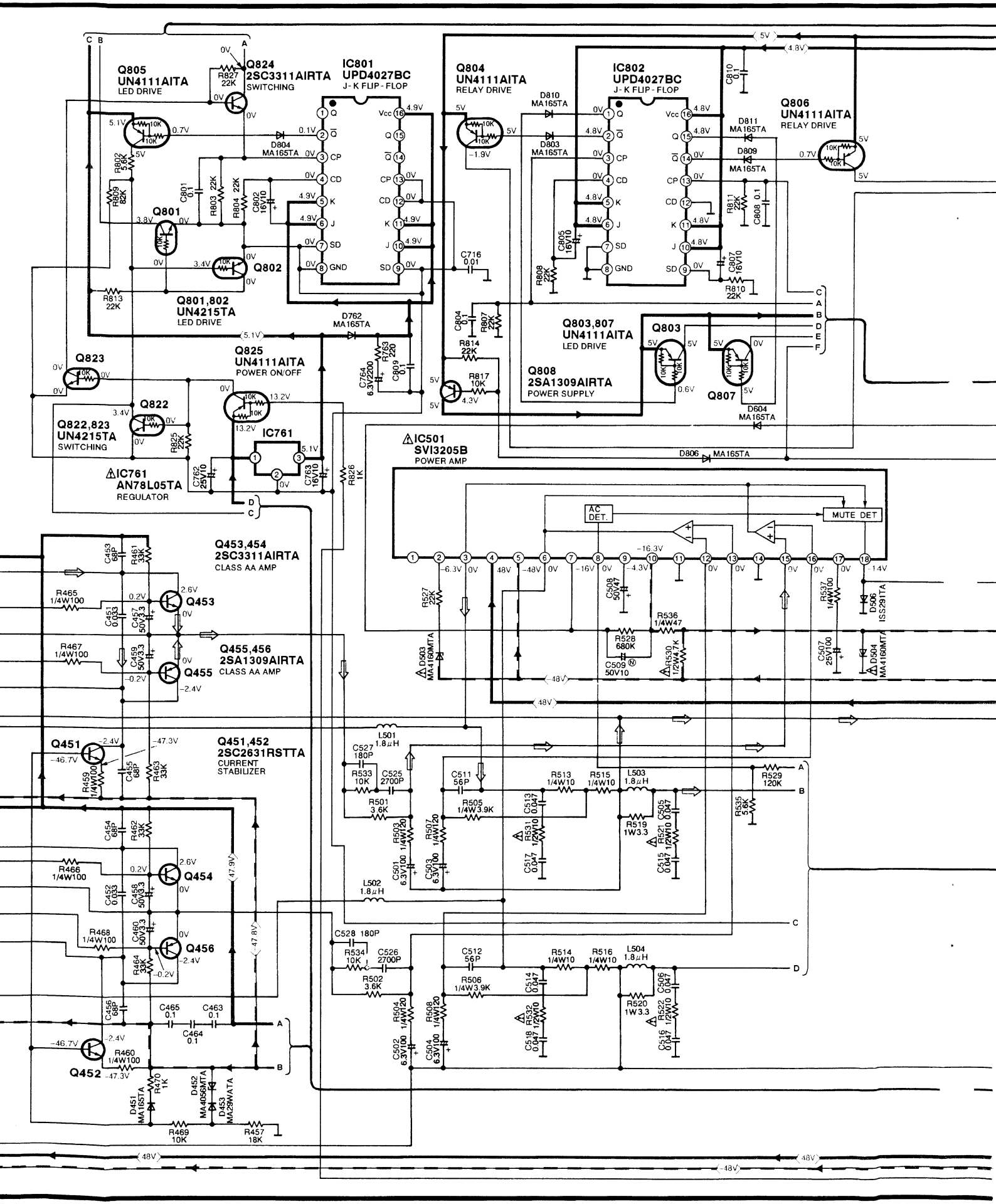
- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- **Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the work table.
  Do not touch the legs of IC or LSI with the fingers directly.

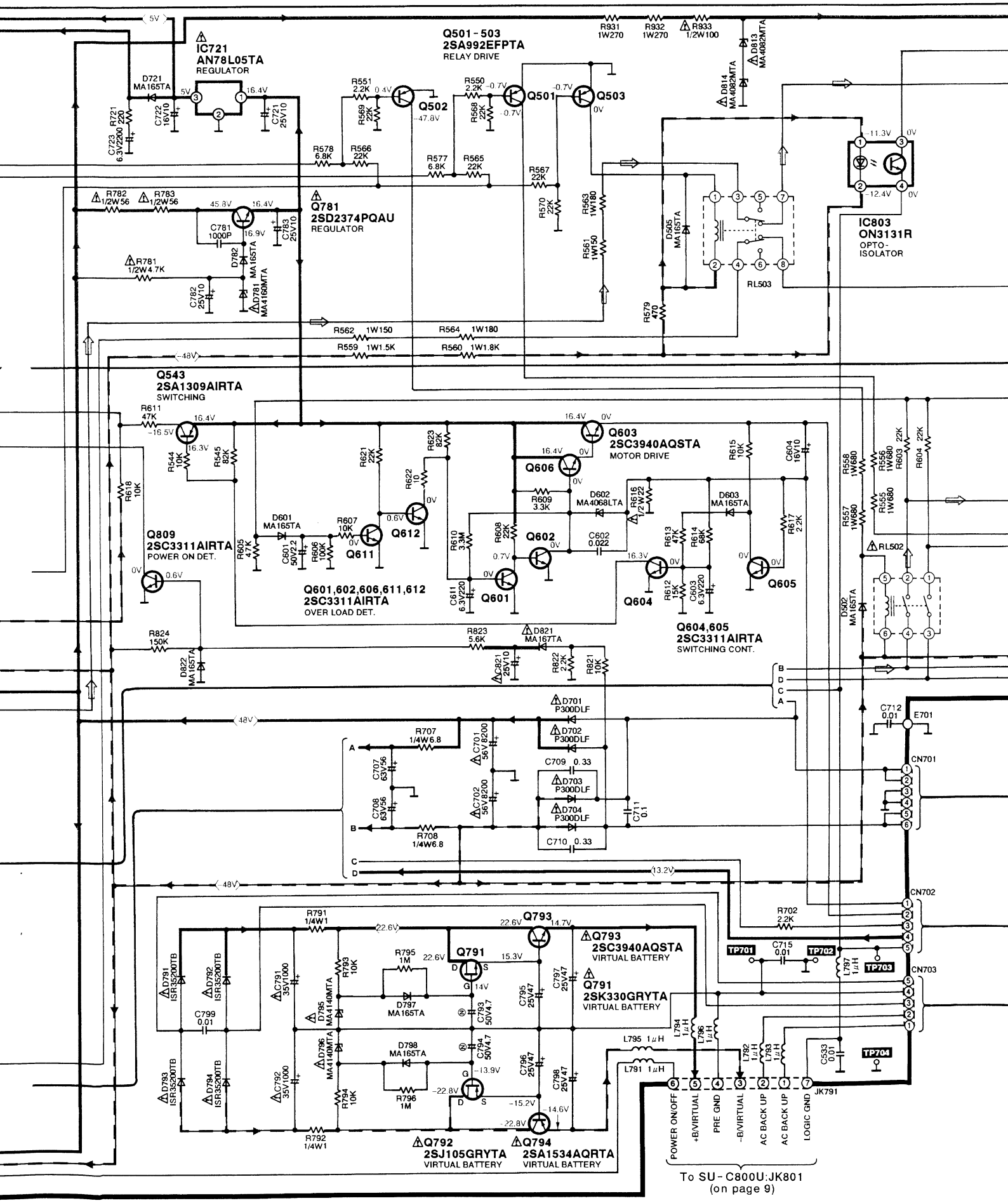
A MAIN CIRCUIT (P.C.Board:on pages 20,21)

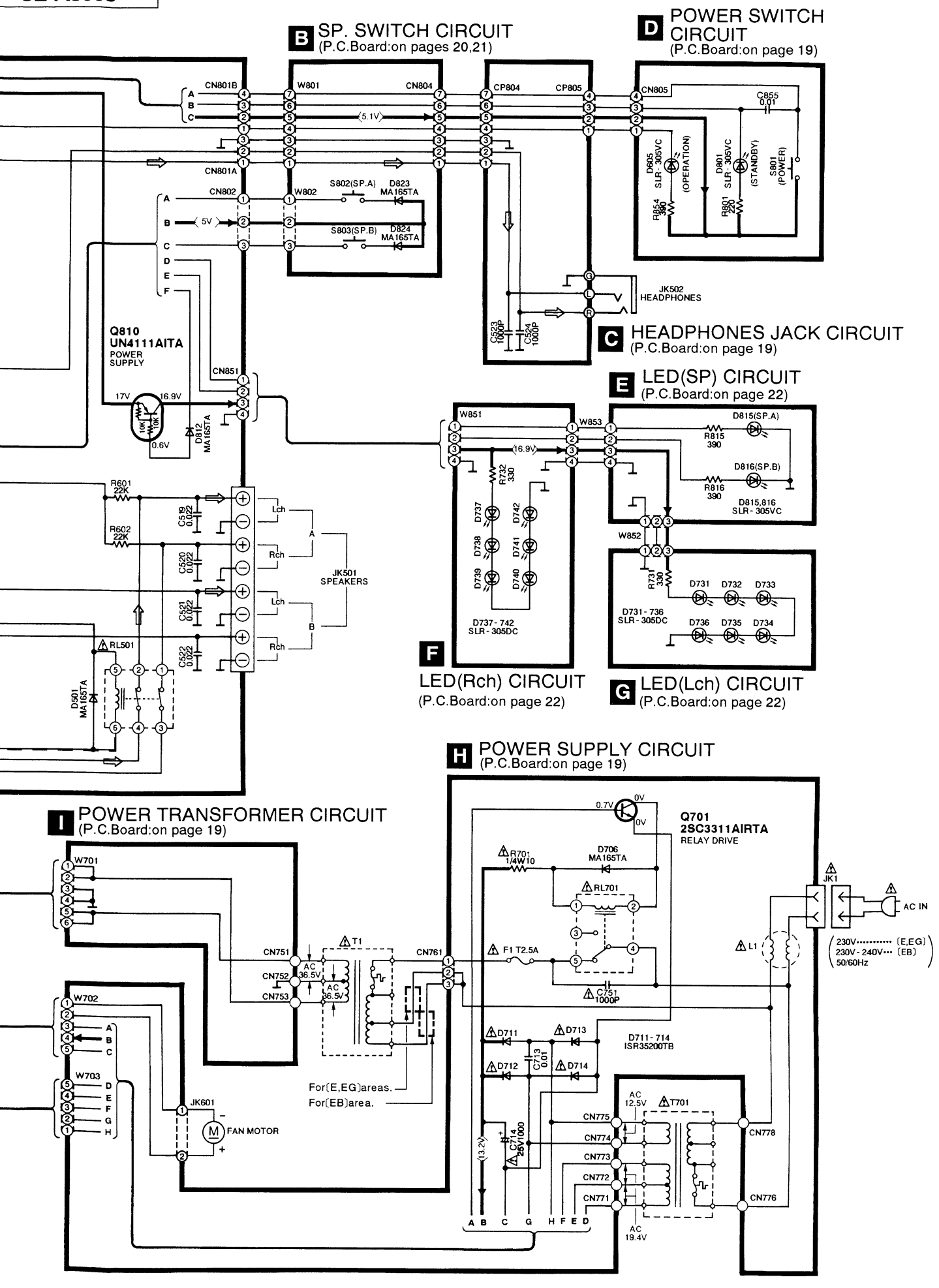


: Positive Voltage Line : Negative Voltage Line : Source Signal Line



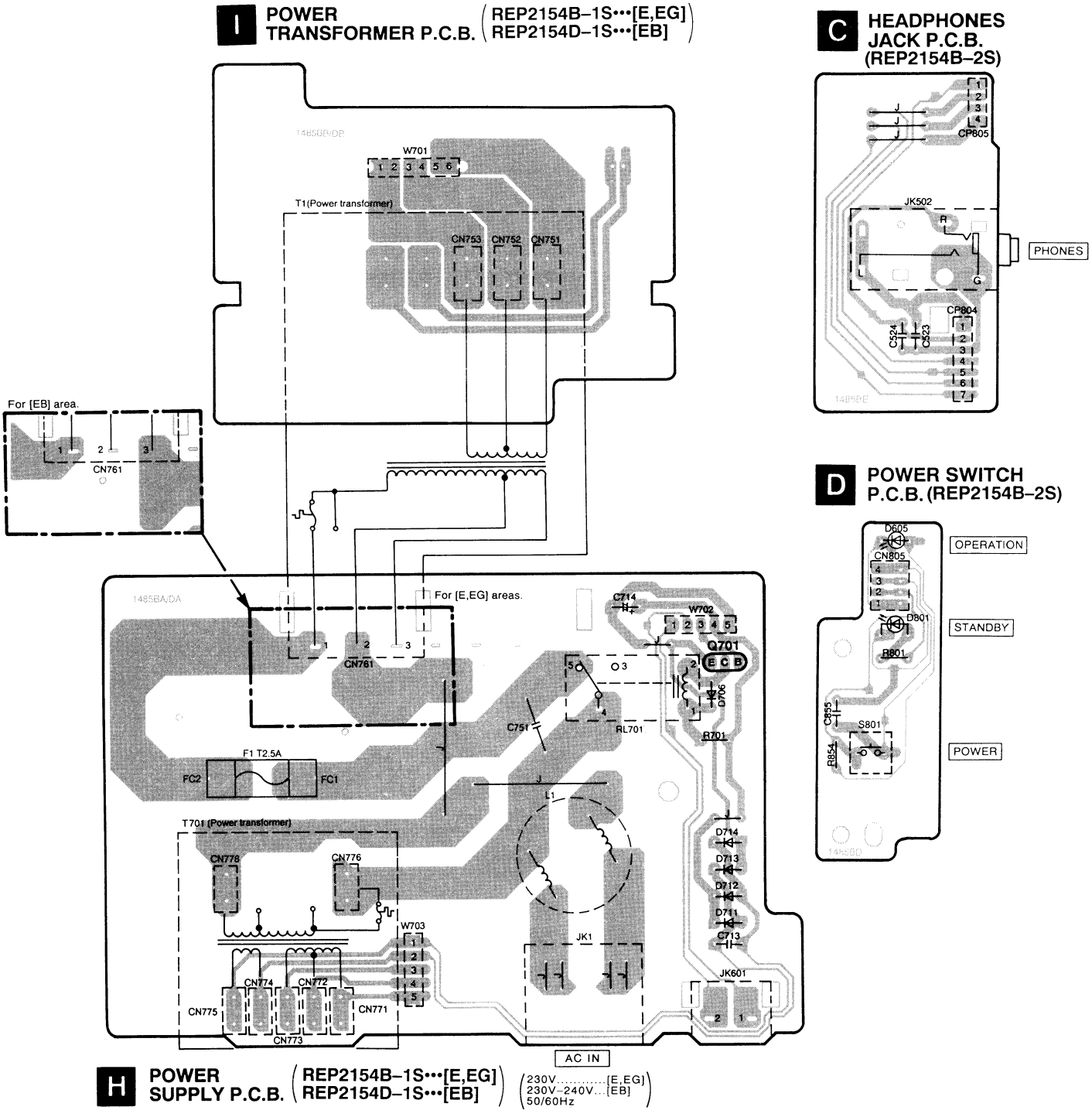
A MAIN CIRCUIT (P.C.Board:on pages 20,21)




B SP. SWITCH CIRCUIT
(P.C.Board:on pages 20,21)
D POWER SWITCH CIRCUIT
(P.C.Board:on page 19)
C HEADPHONES JACK CIRCUIT
(P.C.Board:on page 19)
E LED(SP) CIRCUIT
(P.C.Board:on page 22)
F LED(Rch) CIRCUIT
(P.C.Board:on page 22)
G LED(Lch) CIRCUIT
(P.C.Board:on page 22)
H POWER SUPPLY CIRCUIT
(P.C.Board:on page 19)
I POWER TRANSFORMER CIRCUIT
(P.C.Board:on page 19)
Q810
UN4111AITA
POWER SUPPLY
Q701
2SC3311AIRTA
RELAY DRIVE
JK501 SPEAKERS
JK502 HEADPHONES
JK1
AC IN
230V..... (E,EG)
230V-240V... (EB)
50/60Hz
FAN MOTOR
For(E,EG)areas.
For(EB)area.
D737-742 SLR-305DC
D731-736 SLR-305DC
D711-714 ISR35200TB
D815,816 SLR-305VC
: Positive Voltage Line
: Negative Voltage Line
: Source Signal Line

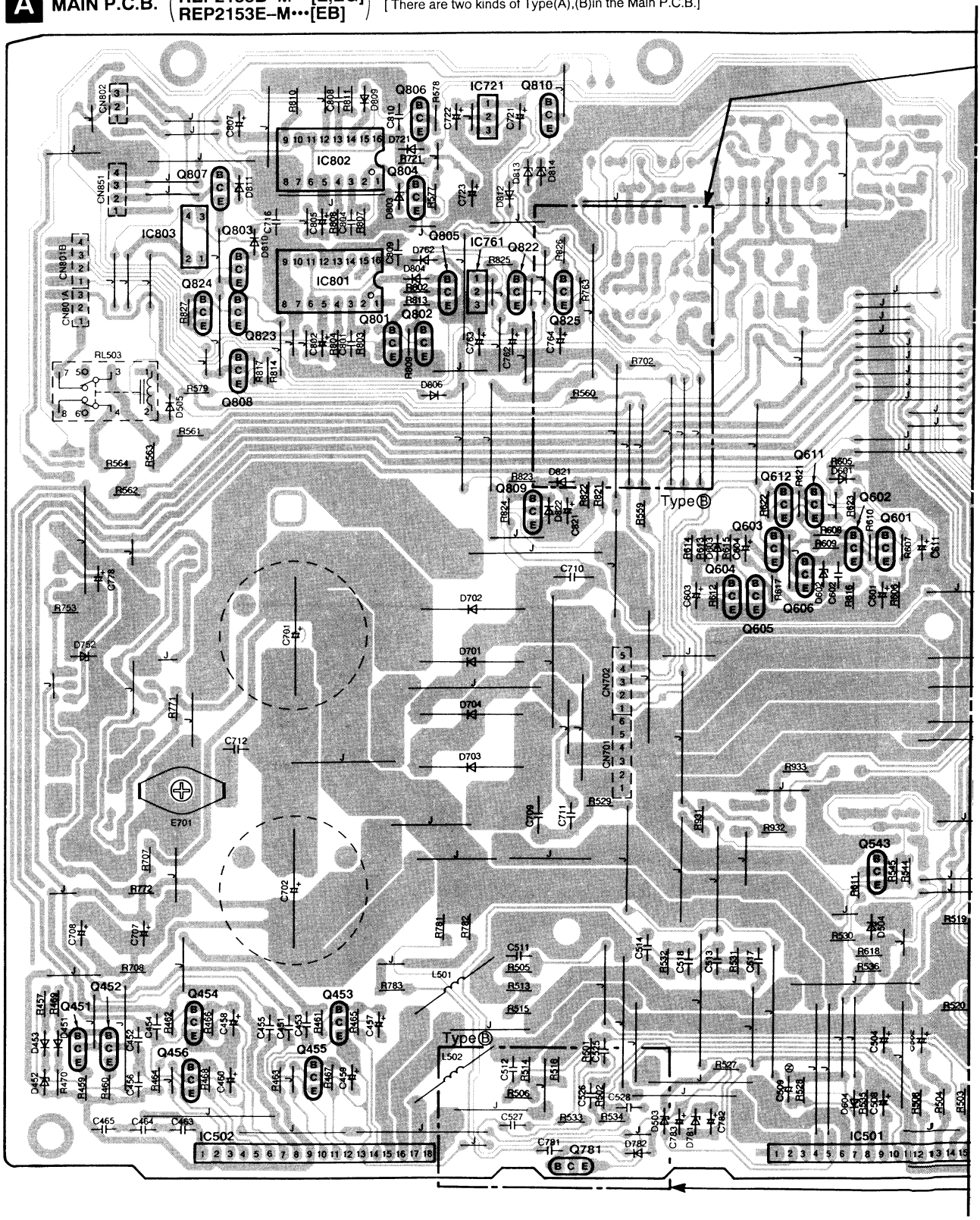
■ Printed Circuit Board Diagram

- This circuit board diagram may be modified at any time with the development of new technology.

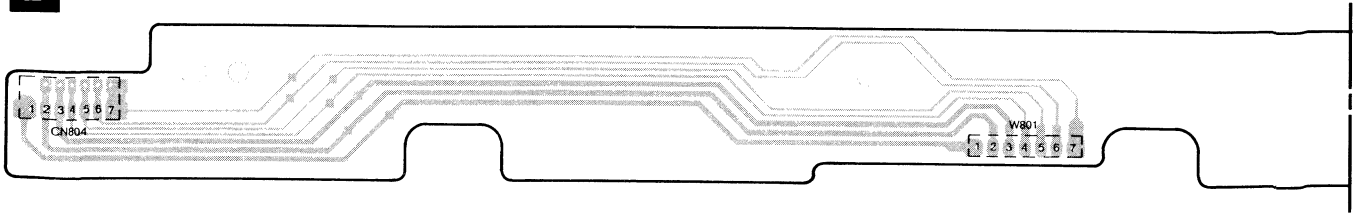


A MAIN P.C.B. (REP2153B–M•••[E,EG] / REP2153E–M•••[EB])

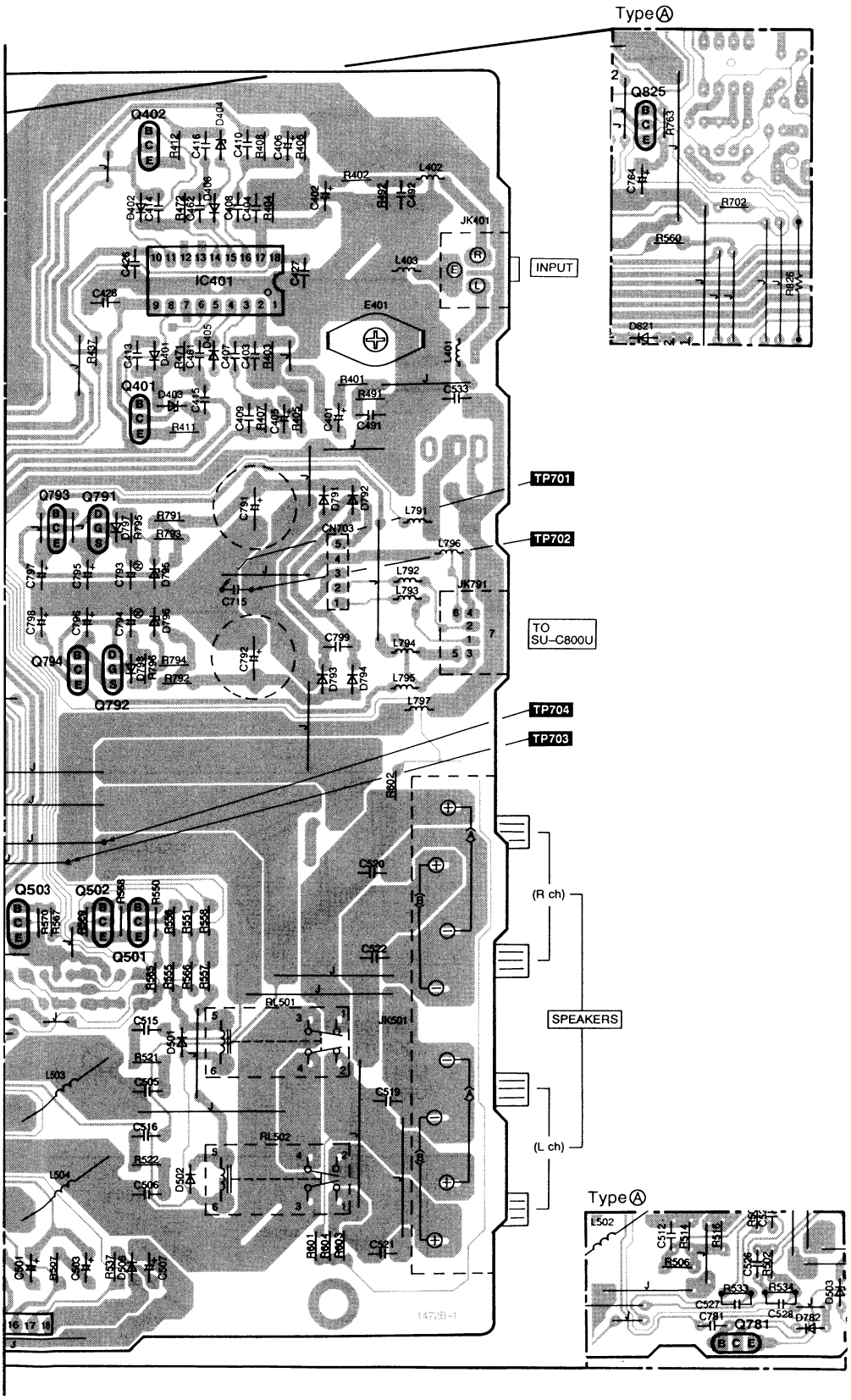
[There are two kinds of Type(A),(B)in the Main P.C.B.]

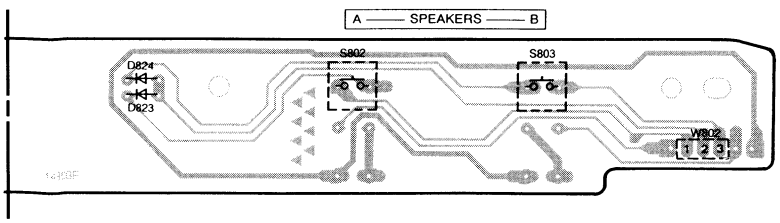


B SP. SWITCH P.C.B. (REP2154B–2S)

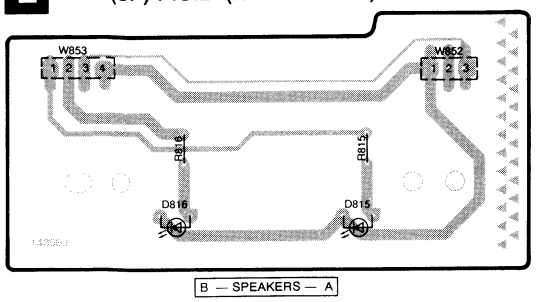


Notes:
Type (B) is different from Type (A) in part of the foil patterns and the parts.
Repair the unit with attention to the differences.

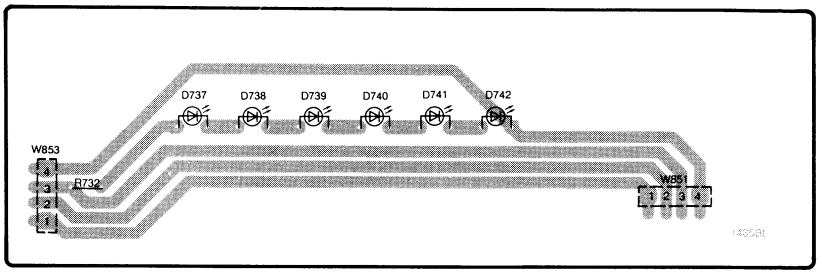




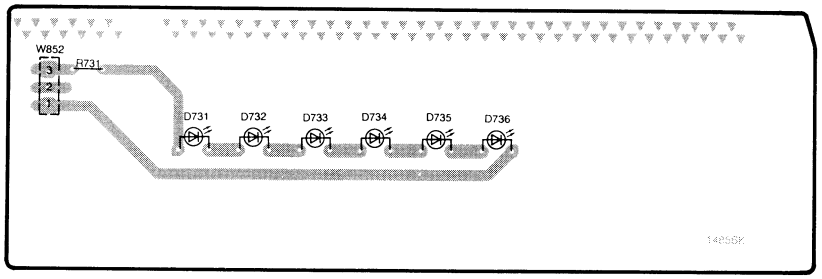
E LED (SP) P.C.B. (REP2154B–2S)

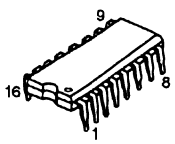
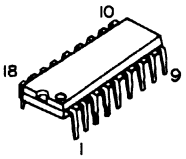
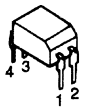
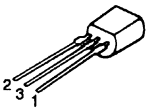
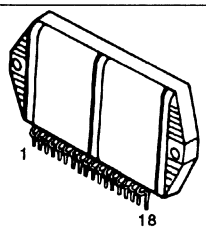
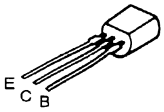
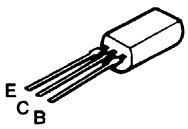
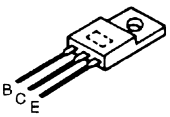
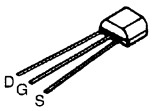
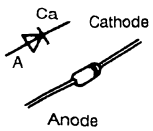
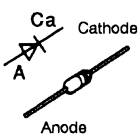
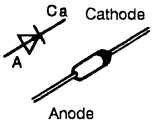
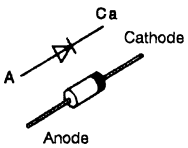
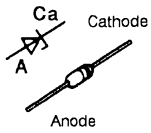
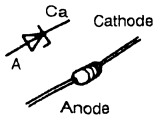
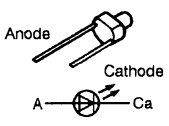


F LED (Rch) P.C.B. (REP2154B–2S)

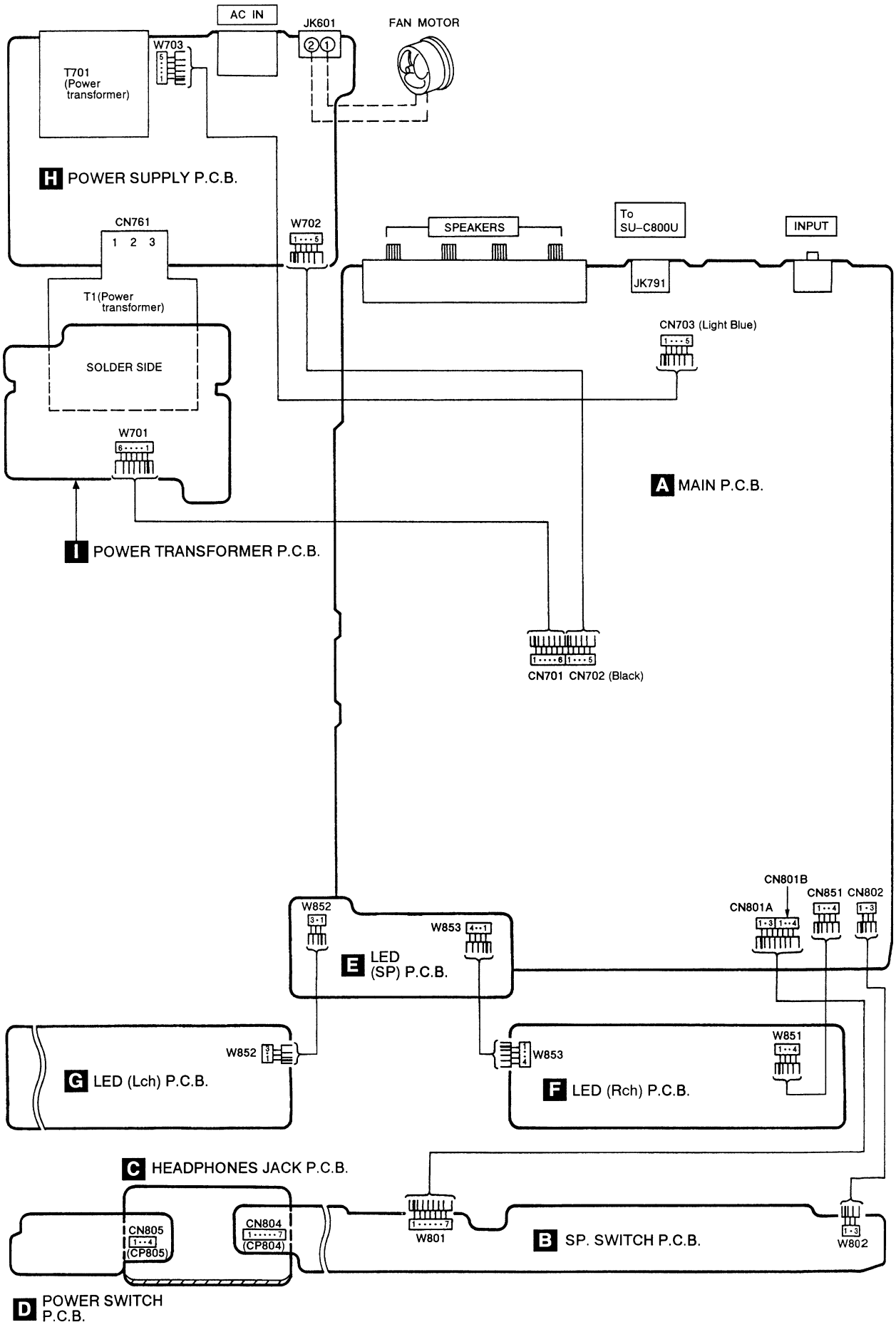


G LED (Lch) P.C.B. (REP2154B–2S)

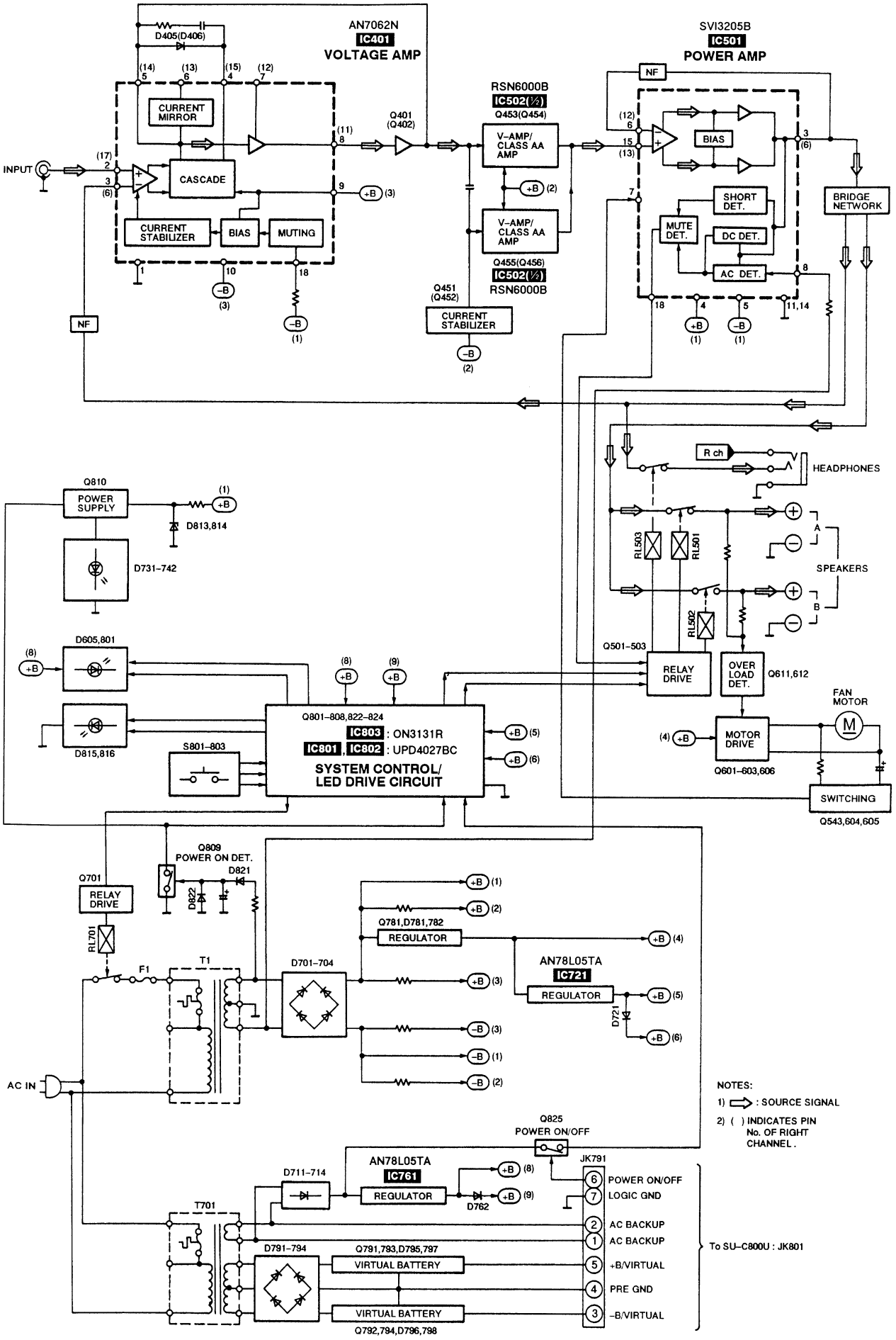


UPD4027BC 	AN7062N 	ON3131R 	AN78L05TA 		RSN6000A SVI3205B
2SA992EFPTA 2SA1123RSTTA 2SC2631RSTTA 	2SA1534RTA 2SC3940AQSTA 	2SD2374PQAU 		2SA1309AIRTA 2SC3311AIRTA UN4111 UN4215	2SJ105GRYTA 2SK330GRYTA 
	MA165 MA167 MA29WA	1SS291TA 	1SR35200TB 	P300DLF 	MA4140M MA4160M 
	MA4036MTA MA4056MTA MA4068L MA4082MTA	SLR-305VC SLR-305DC 			

■ Wiring Connection Diagram



■ Block Diagram



■ Replacement Parts List

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.
*Remote Control Ass'y: Supply period for three years from termination of production.
*The "(SF)" mark denotes the standard part.
*<VRD>: indicates parts that are supplied by Video Recorder Division.

Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC401	AN7062N	IC, VOLTAGE AMP.	
IC501	SVI3205B	IC, POWER AMP.	⚠
IC502	RSN6000A	IC, V-AMP	
IC721	AN78L05TA	IC, REGULATOR	⚠
IC761	AN78L05TA	IC, REGULATOR	⚠
IC801, 802	UPD4027BC	IC, J-K FLIP-FLOP	
IC803	ON3131R	IC, OPTO-ISOLATOR	
		TRANSISTOR(S)	
Q401, 402	2SA1123RSTTA	TRANSISTOR	
Q451, 452	2SC2631RSTTA	TRANSISTOR	
Q453, 454	2SC3311AIRTA	TRANSISTOR	
Q455, 456	2SA1309AIRTA	TRANSISTOR	
Q501-503	2SA992EFPTA	TRANSISTOR	
Q543	2SA1309AIRTA	TRANSISTOR	
Q601	2SC3311AIRTA	TRANSISTOR	
Q602	2SC3311AIRTA	TRANSISTOR	
Q603	2SC3940AQSTA	TRANSISTOR	
Q604-606	2SC3311AIRTA	TRANSISTOR	
Q611, 612	2SC3311AIRTA	TRANSISTOR	
Q701	2SC3311AIRTA	TRANSISTOR	
Q781	2SD2374PQAU	TRANSISTOR	⚠
Q791	2SK330GRYTA	TRANSISTOR	⚠
Q792	2SJ105GRYTA	TRANSISTOR	⚠
Q793	2SC3940AQSTA	TRANSISTOR	⚠
Q794	2SA1534RTA	TRANSISTOR	⚠
Q801, 802	UN4215	TRANSISTOR	
Q803-807	UN4111	TRANSISTOR	
Q808	2SA1309AIRTA	TRANSISTOR	
Q809	2SC3311AIRTA	TRANSISTOR	
Q810	UN4111	TRANSISTOR	
Q822, 823	UN4215	TRANSISTOR	
Q824	2SC3311AIRTA	TRANSISTOR	
Q825	UN4111	TRANSISTOR	
		DIODE(S)	
D401, 402	MA167	DIODE	
D403, 404	MA4036MTA	DIODE	
D405, 406	MA165	DIODE	
D451	MA165	DIODE	
D452	MA4056MTA	DIODE	

Ref. No.	Part No.	Part Name & Description	Remarks
D453	MA29WA	DIODE	
D501, 502	MA165	DIODE	
D503, 504	MA4160M	DIODE	⚠
D505	MA165	DIODE	
D506	1SS291TA	DIODE	
D601	MA165	DIODE	
D602	MA4068L	DIODE	
D603, 604	MA165	DIODE	
D605	SLR-305VC	LED	
D701-704	P300DLF	DIODE	⚠
D706	MA165	DIODE	
D711-714	1SR35200TB	DIODE	⚠
D721	MA165	DIODE	
D731-742	SLR-305DC	LED	
D752	MA4160M	DIODE	⚠
D762	MA165	DIODE	
D781	MA4160M	DIODE	⚠
D782	MA165	DIODE	
D791-794	1SR35200TB	DIODE	⚠
D795, 796	MA4140M	DIODE	⚠
D797, 798	MA165	DIODE	
D801	SLR-305VC	LED	
D803, 804	MA165	DIODE	
D806	MA165	DIODE	
D809-812	MA165	DIODE	
D813, 814	MA4082MTA	DIODE	⚠
D815, 816	SLR-305VC	LED	
D821	MA167	DIODE	⚠
D822-824	MA165	DIODE	
		COIL(S)	
L1	SLQZ650MH49	COIL	⚠
L401, 402	ELEXT100KA9	COIL	
L403	BL02RN1R62T2	COIL	
L501-504	SLQY18G-10	COIL	
L791-797	ELEXT1R0KA9	COIL	
		TRANSFORMER(S)	
T1	RTP1P5B006-W	POWER TRANSFORMER	⚠
T701	RTP1J5B001-W	POWER TRANSFORMER	⚠
		FUSE(S)	
F1	XBA2C25TB0	FUSE, 250V, 2.5A	⚠

Ref. No.	Part No.	Values & Remarks
C778	ECA1EPX470TB	25V 47U
C781	ECBT1H102KB5	50V 1000P
C782, 783	ECEA1EKA100B	25V 10U
C791, 792⚠	ECA1VPT102ZE	35V 1000P
C793, 794	ECEA1HBZ4R7B	50V 4.7U

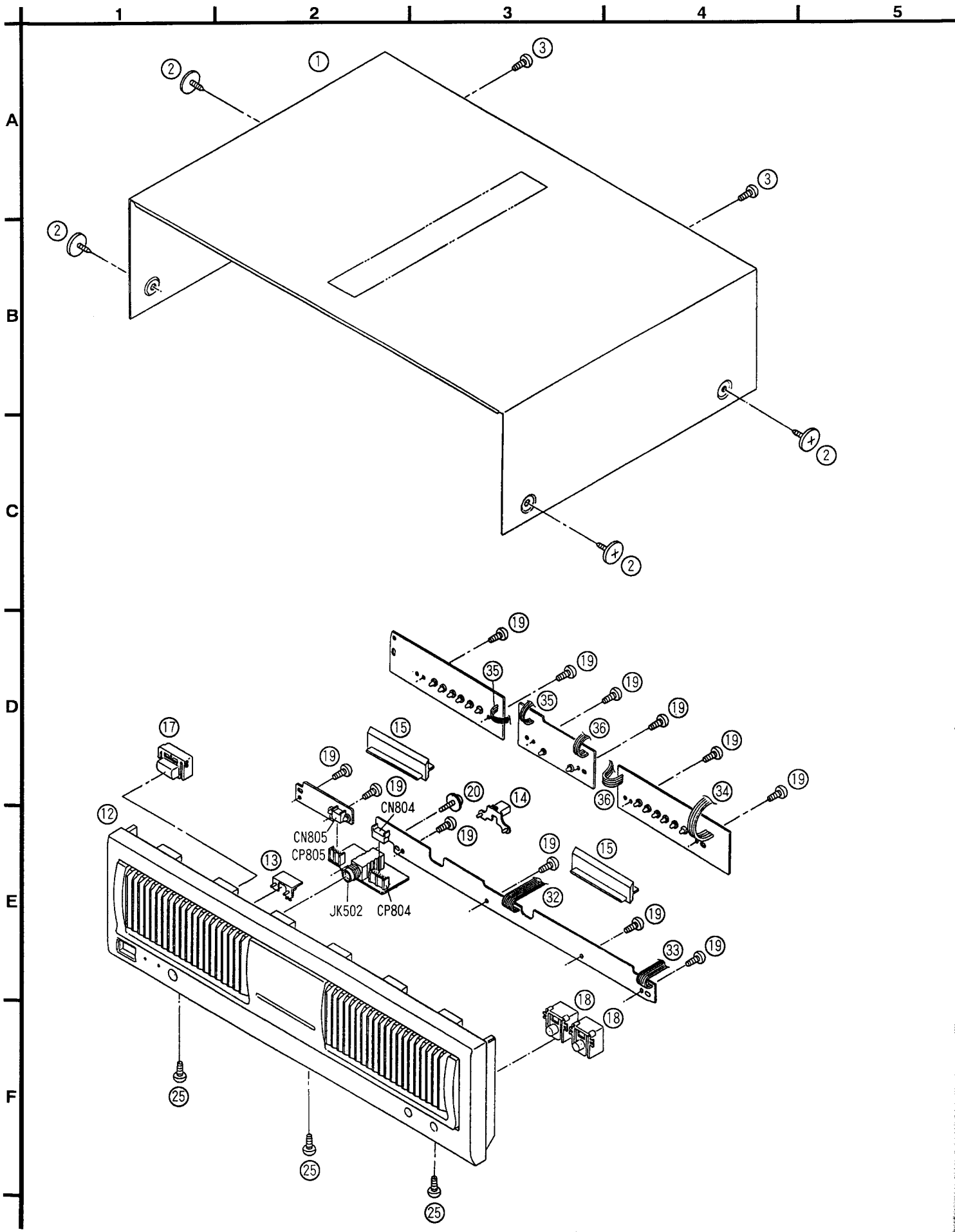
Ref. No.	Part No.	Values & Remarks
C795-798	ECA1EPXS470B	25V 47U
C799	ECKR2H103ZU	500V 0.01U
C801	ECBT1H104ZF5	50V 0.1U
C802	RCE1CKA100BG	16V 10U
C804	ECBT1H104ZF5	50V 0.1U

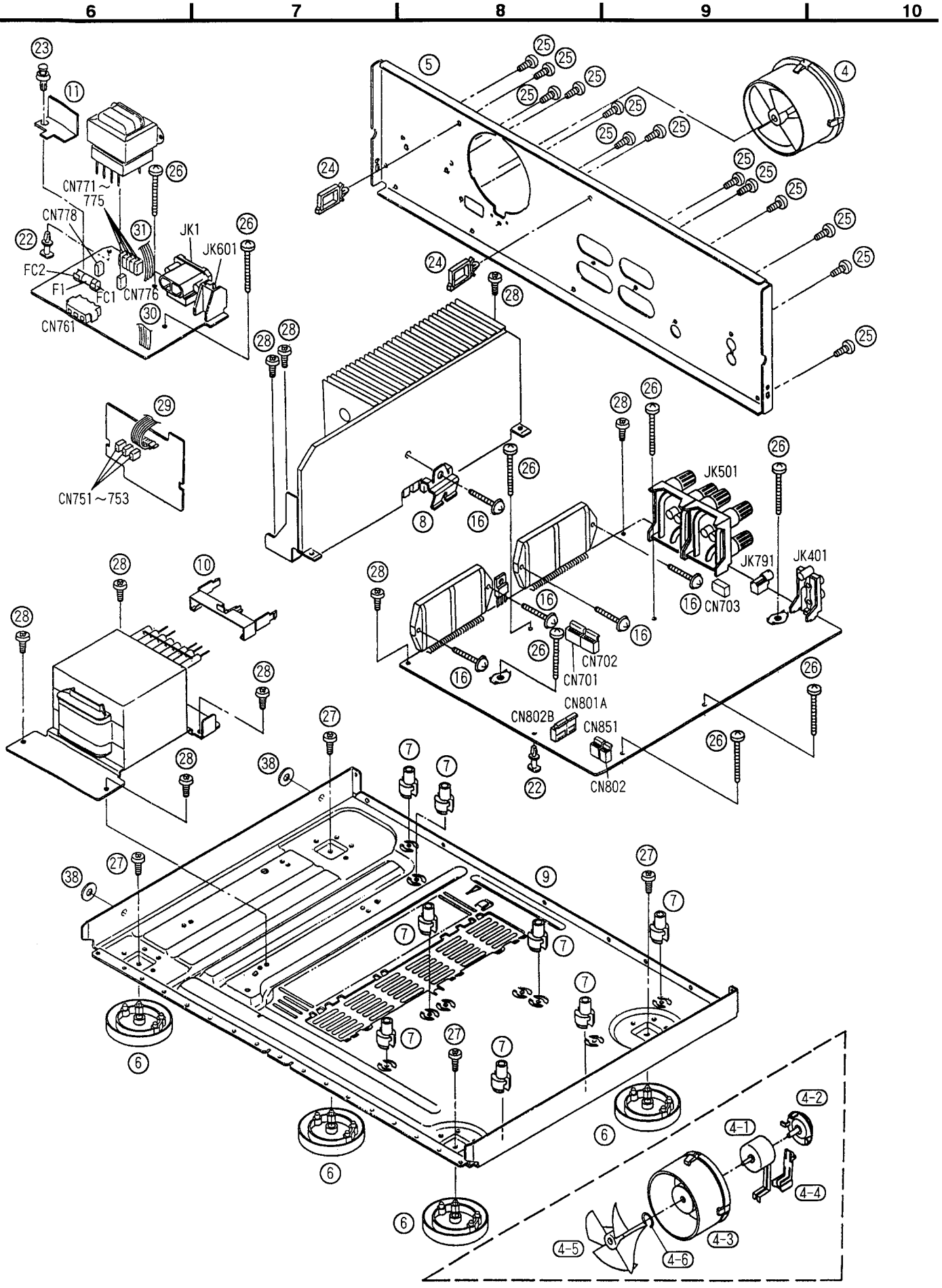
Ref. No.	Part No.	Values & Remarks
C805	RCE1CKA100BG	16V 10U
C807	RCE1CKA100BG	16V 10U
C808-810	ECBT1H104ZF5	50V 0.1U
C821 ⚠	ECEA1EKA100B	25V 10U
C855	ECBT1C103NS5	16V 0.01U

Note: The reference number SA represent the grease and tool used for this unit.

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKM0219F-K	CABINET	
2	SNE2129-1	SCREW	
3	XTBS3+8JFZ1	SCREW	
4	REM0020-1	FAN ASS'Y	
4-1	MDN-4RB4MRC	FAN MOTOR	
4-2	RMQ0208-K	FAN MOTOR COVER	
4-3	RMQ0209-K	FAN CASE	
4-4	RMQ0212-K	FAN TERMINAL	
4-5	SHE232-1	FAN	
4-6	SUS271	SPRING	
5	RGR0227A-A	REAR PANEL	(E, EG)
5	RGR0227B-A1	REAR PANEL	(EB)
6	RKA0053-A	FOOT	
7	RKQ0089	P. C. B. SUPPORT	
8	RMC0158	TRANSISTOR HOLDER	
9	RMK0200-3	BOTTOM SHASSIS	
10	RMN0217	HOLDER	
11	RMZ0354	COVER	
12	RFKGEA800SEK	FRONT PANEL ASS'Y	
13	RGL0301-Q	PANEL LIGHT A	
14	RGL0302-Q	PANEL LIGHT B	
15	RGL0303-Q	PANEL LIGHT C	
16	XTW3+15T	SCREW	
17	RGU1270-K	BUTTON, POWER	
18	RGU1271-K	BUTTON, SPEAKER	
19	RHD26017	SCREW	
20	RHD26018	SCREW	
22	SHR8006	SPACER	
23	SHR9112	SPACER	
24	SHR9814	CLAMPER	
25	XTBS3+8JFZ1	SCREW	
26	XTB3+20JFZ	SCREW	
27	XTB3+6G	SCREW	
28	XTB3+8JFZ	SCREW	
29	RWJ3906440QQ	FLAT CABLE(6P) (W701)	
30	RWJ1805480XX	FLAT CABLE(5P) (W702)	
31	RWJ3905390QQ	FLAT CABLE(5P) (W703)	
32	RWJ1807220KX	FLAT CABLE(7P) (W801)	
33	RWJ1803090KX	FLAT CABLE(3P) (W802)	
34	RWJ1804130KX	FLAT CABLE(4P) (W851)	
35	RWJ1803100KK	FLAT CABLE(3P) (W852)	
36	RWJ1804100KX	FLAT CABLE(4P) (W853)	
38	RMG0332-K	RUBBER	
		PACKING MATERIALS	
P1	RPG2622	PACKING CASE	(E, EG)
P1	RPG2623	PACKING CASE	(EB)
P2	RPQ0573	SPACER	
P3	RPQ0553	SPACER	
P4	RPG2618	PACKING CASE	
P5	RPG2617	PACKING CASE(SU-C800U)	
P6	RPN0752	PAD	
P7	RPN0917	PAD(SU-C800U)	
P8	SPP730	PROTECTION COVER	
P9	SPP756	PROTECTION COVER(SU-C800U)	
P10	RPQ0164	PAD	
P11	RPF0139	PROTECTION COVER	
P12	RPH0032	MIRROR SHEET	(EB)
		ACCESSORIES	
A1	RAK-SU180WH	REMOTE CONTROL TRANSMITTER	
A1-1	RKK0057-K	BATTERY COVER	
A2	RQA0013	WARRANTY CARD	
A3	RQCB0169	SERVICE CENTER LIST	
A4	RFKSEA800SEK	INSTRUCTION MANUAL	(E)
A4	RQT3100-E	INSTRUCTION MANUAL	(EG)
A4	RQT3101-B	INSTRUCTION MANUAL	(EB)
A5	RJA0019-2K	AC POWER SUPPLY CORD	⚠(SF) (E, EG)
A5	VJA0733	AC POWER SUPPLY CORD	⚠(SF) <VRD> (EB)
A6	SJP2276	PIN CORD	
A7	RJL6D001B10	AMP. CONNECTION CABLE	
		GREASE OR JIG/TOOL	
SA1	RFKX0002	COMPOUND GREASE	

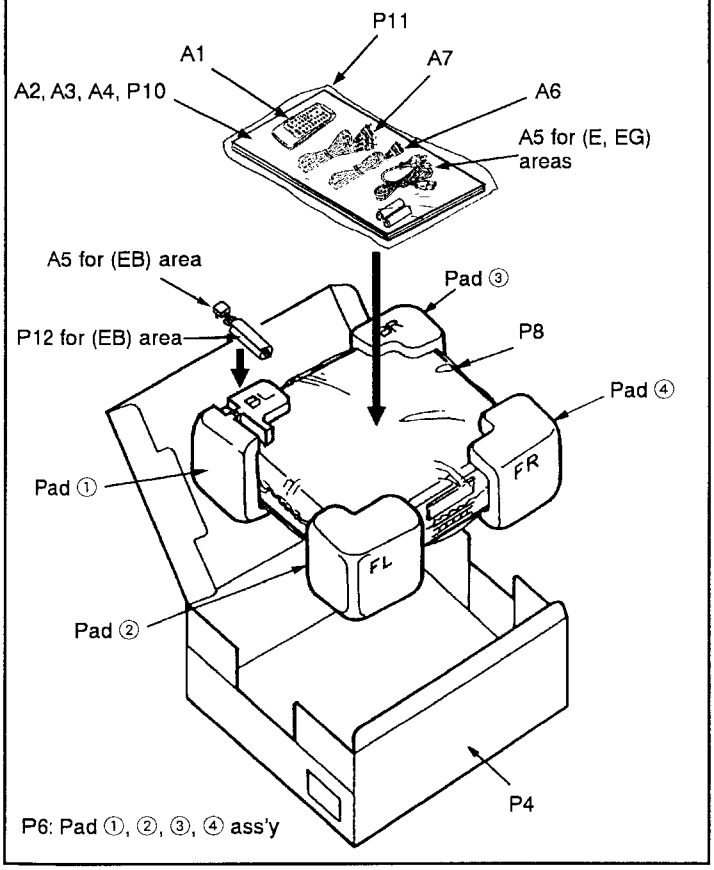
■ Cabinet Parts Location



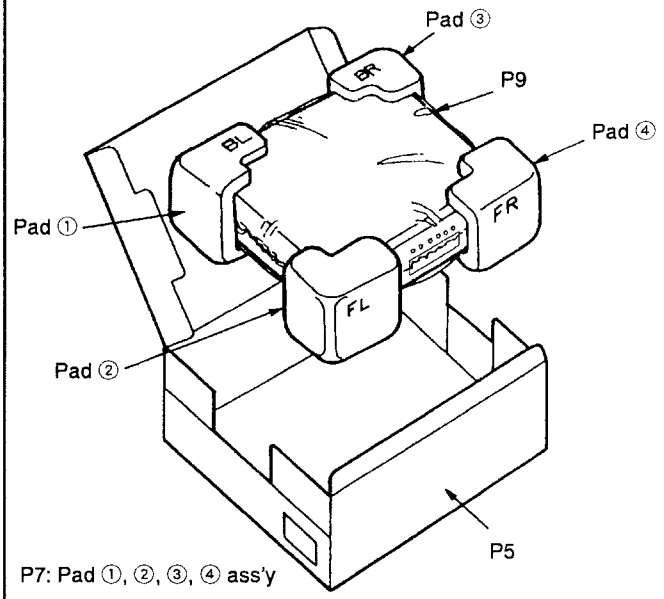

6
7
8
9
10
CN771~775
CN778
JK1
JK601
FC2
F1
FC1
CN776
CN761
CN751~753
JK501
JK791
JK401
CN703
CN702
CN701
CN801A
CN802B
CN851
CN802
4-1
4-2
4-3
4-4
4-5
4-6

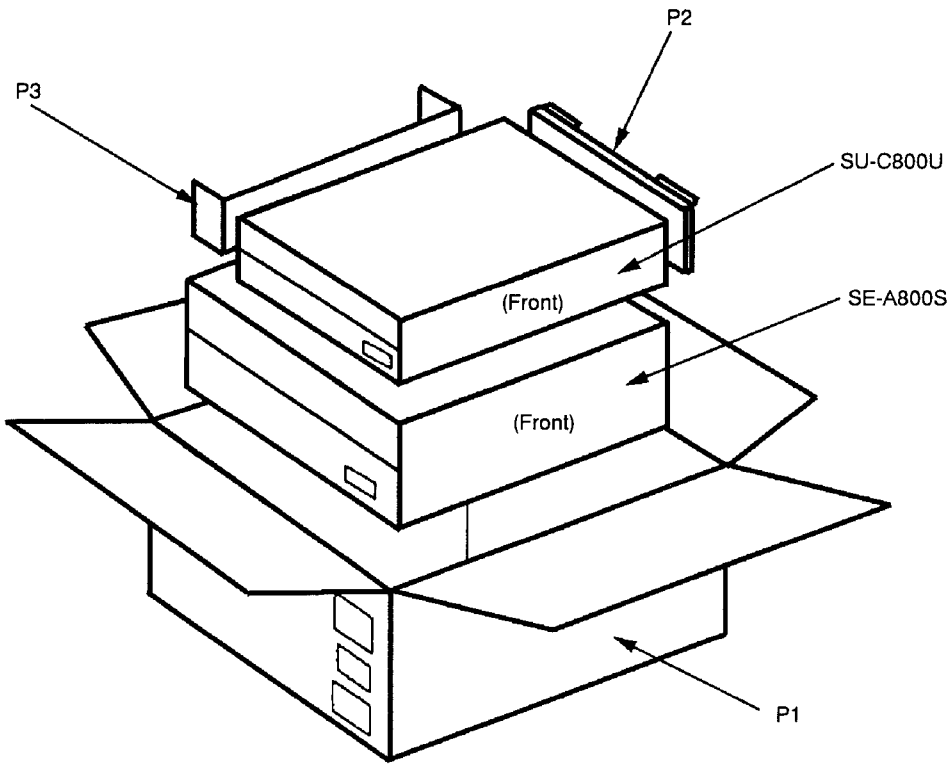
■ Packaging

SE-A800S: Power amplifier



SU-C800U: Control amplifier





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F9507090000 TW/HH

ORDER NO. AD9506166C8

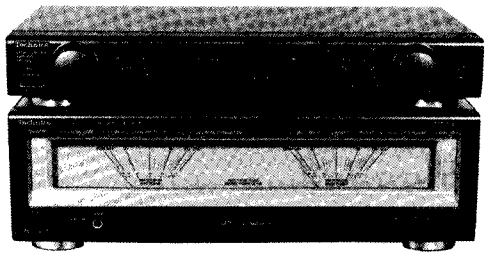
Service Manual

Control Amplifier — Amplifier

SU-C800U

System: SU-A900D

SU-C800U

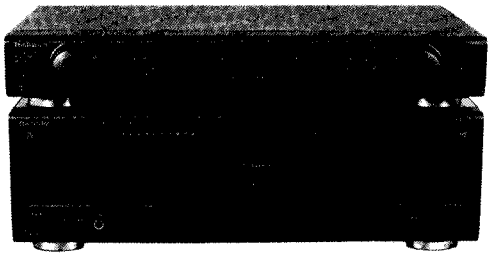


Remote Control Transmitter

SE-A900S

System: SU-A800D

SU-C800U



Remote Control Transmitter

SE-A800S

Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Colour

(K) : Black

Areas

Suffix for Model No.	Area	Colour
(E)	Europe, Asia, Latin America, Middle East, Africa and Oceania	(K)

System: SU-A900D

Control amplifier	**SU-C800U**
Power amplifier	**SE-A900S**

System: SU-A800D

Control amplifier	**SU-C800U**
Power amplifier	**SE-A800S**

Specifications (DIN 45 500)

Total harmonic distortion Vol. Max 20 Hz – 20 kHz 0.01 %
Input sensitibity/impedance
PHONO 2.5 mV/47 kΩ
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC 200 mV/27 kΩ
Phono maximun input voltage (1 kHz, RMS) 150 mV
S/N
PHONO 76 dB (77 dB, IHF '66)
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC 90 dB (97 dB, IHF '66)
Frequency response
PHONO RIAA standard curve ±1 dB (30 Hz – 15 kHz)
TUNER, CD, AUX, TAPE 1, TAPE 2/DCC
3 Hz – 80 kHz (+0, – 3 dB)
+0 dB, – 0.3 dB (20 Hz – 20 kHz)
Tone controls
BASS 50 Hz, +10 dB, –10 dB
TREBLE 20 kHz, +10 dB, –10 dB

Output voltage
TAPE 1, TAPE 2/DCC REC OUT 200 mV
PRE OUT 1 V
Channel balance (AUX, 250 Hz – 6.3 kHz) ±1 dB
Channel separatoion (AUX, 1 kHz) 50 dB

■ **GENERAL**
Dimensions (W × H × D) 430 × 89.3 × 307 mm
Weight 2.7 kg

Notes:
1. Design and specifications are subject to change without notice. Weight and dimensions are approximate.
2. Total harmonic distortion is measured by the digital spectrum analyzer.

⚠WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics®

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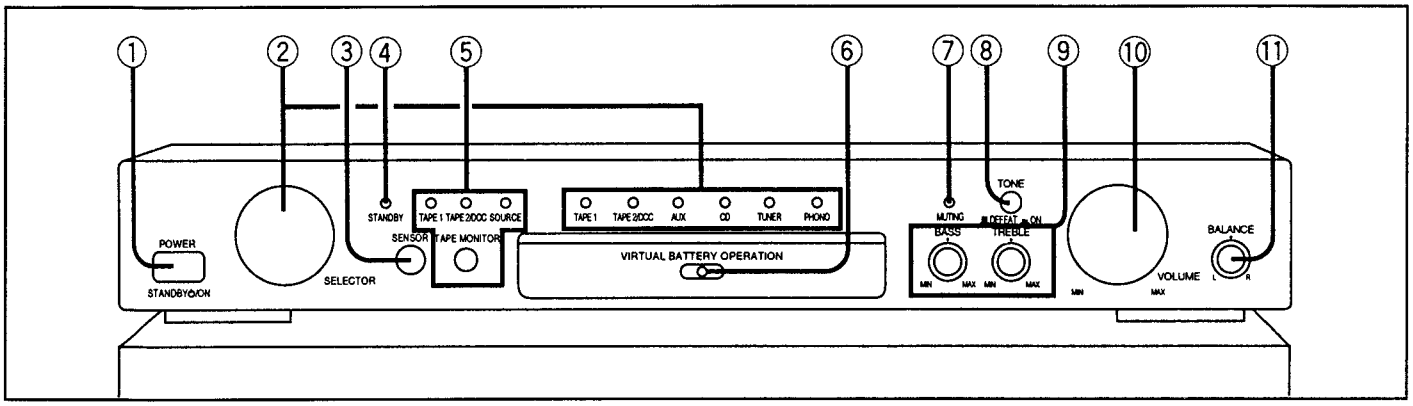
Block Diagram	13
Replacement Parts List	14~17
Cabinet Parts Location	16

NOTE:
Refer to the service manual for Model No. SE-A900S (ORDER No. AD9506164C8) or SE-A800S (ORDER No. AD9506165C2) for information on "Accessories", "Connections", "Operations" and "Packaging".

■ Front Panel Controls



① Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
If the power amplifier is turned on while the control amplifier is on, this switch can then be used to turn both amplifiers on or to standby mode simultaneously.

② Input selector/indicators (SELECTOR)

③ Remote control signal sensor (SENSOR)

④ "STANDBY" indicator (STANDBY)
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.

⑤ Tape-monitor button/indicators (TAPE MONITOR)

⑥ "VIRTUAL BATTERY OPERATION" indicator
This will illuminate to indicate that the virtual battery (a circuit which removes the noise contained in the power supply while playing a sound input source) is functioning.

⑦ Muting indicator (MUTING)

⑧ Tone control button (TONE)

⑨ Tone controls (BASS, TREBLE)

⑩ Volume control (VOLUME)

⑪ Balance control (BALANCE)

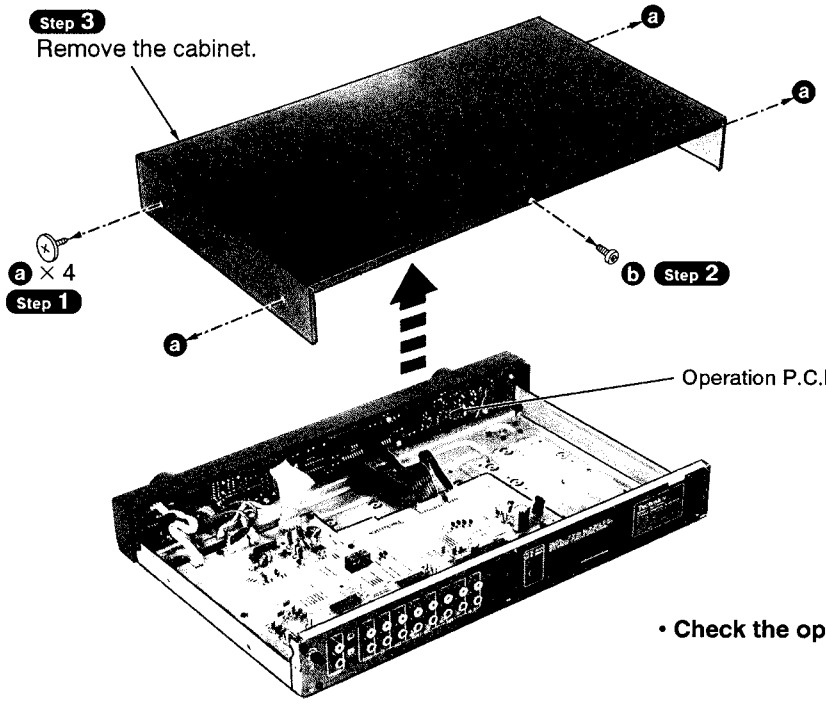
■ Operation Check and Main Component Replacement Procedures

NOTE

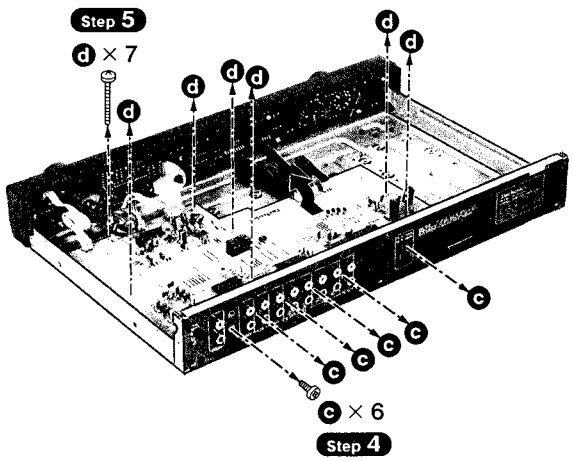
1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.
3. Illustrated screws are equivalent to actual size.

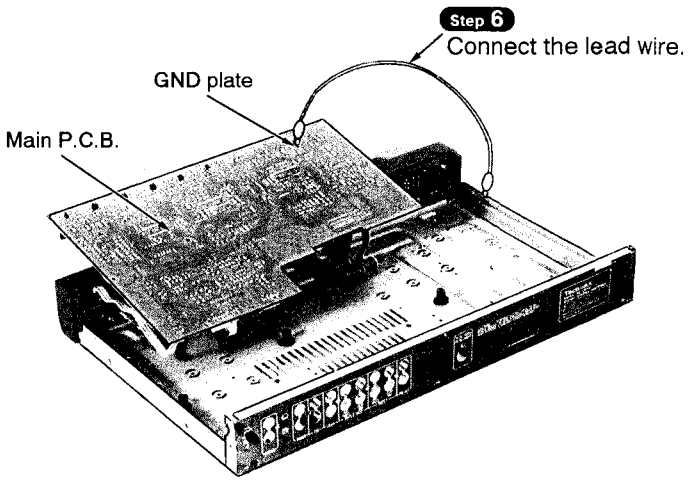
1. Checking for the operation P.C.B. and main P.C.B.

ⓐ (Black)
[RHD30035–K1]
ⓑ, ⓒ (Black)
[XTBS3+8JFZ1]
ⓓ (Black)
[XTB3+20JFZ]



• Check the operation P.C.B. this condition.





• Check the main P.C.B. as shown above.

■ To Supply Power Source

This unit SU-C800U is designed to operate on power supplied from the Power Amplifier SE-A900S or SE-A800S. When operating the unit SU-C800U alone for testing and servicing, without having power supplied from the Power Amplifier SE-A900S or SE-A800S, use the following method.

Power Supply to Main Circuit

1. Apply 11 V AC power to the section between the point TP1 and the point TP2.
2. Connect the DC +12 V to +15 V (more than 0.1 A) to the point TP5, and the GND terminal to the point TP4 using the DC power supply.
2. Connect the DC –12 V to –15 V (more than 0.1 A) to the point TP3, and the GND terminal to the point TP4 using the DC power supply.

Operation Check

1. Input a signal (1 kHz, 100 mV) to the each line-in terminal.
3. Connect the oscilloscope or the speaker with the built-in amplifier to the PRE OUT terminals and check if the signals are outputting from this unit.

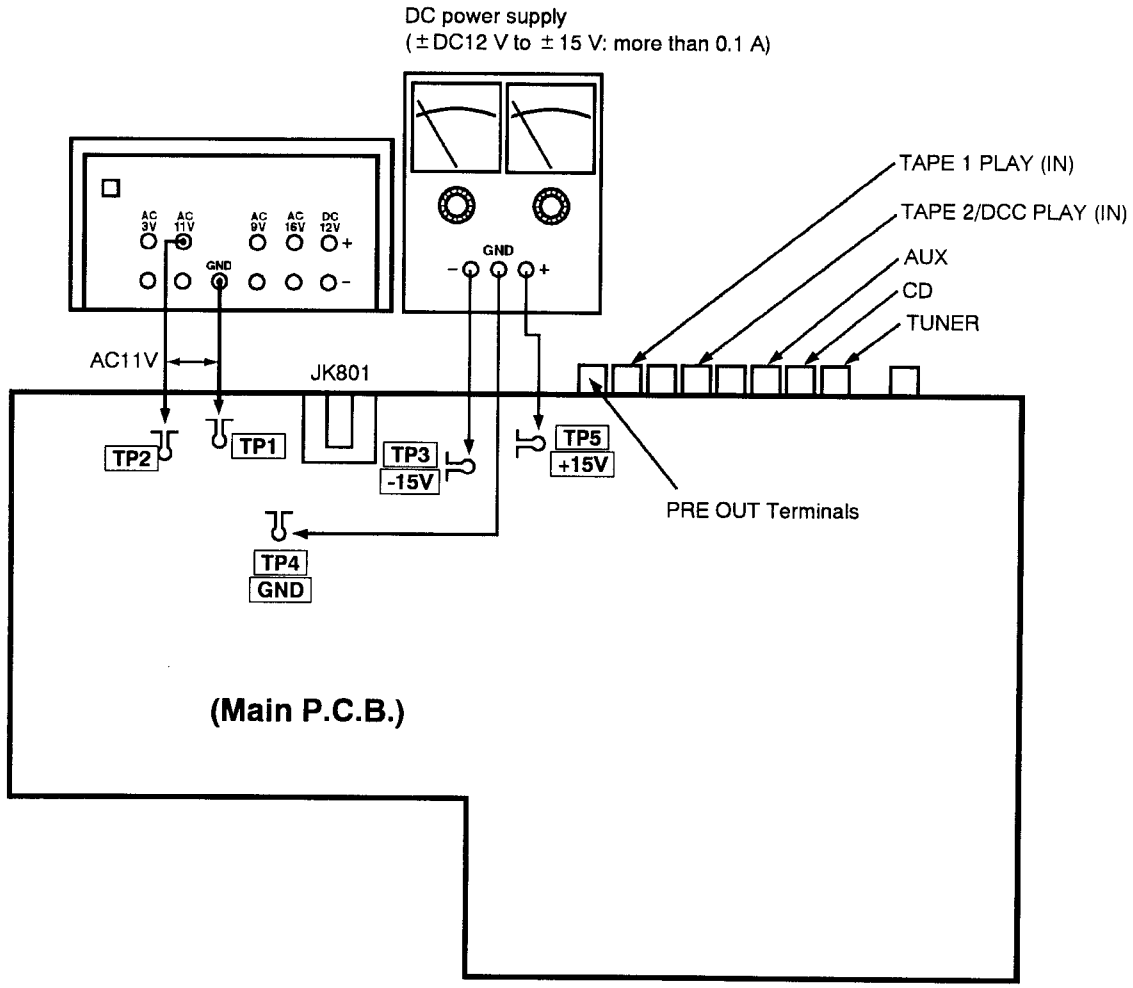


Fig. 1

■Function of IC Terminals

● IC701 (M37470M2332S)

Pin No.	Terminal Name	I/O	Function
1	SDATA	O	Data signal output for input select IC (IC201 and IC202)
2	CLOCK	O	Clock signal output for input select IC (IC201 and IC202)
3	STB	O	Storobe signal output for input select IC (IC201 and IC202)
4	SELLED2	O	Input select LED drive signal output
5	SELLED1		
6	SELLED0		
7	VRDOWN	O	Motor drive signal output (Volume down)
8	VRUP	O	Motor drive signal output (Volume up)
9	ASWMUTE	O	Audio signal muting signal output
10	BATLVL1	I	Not used, connect to GND
11	KEYAD	I	Power switch and Tape monitor switch signal
12	RSWAD	I	Input selector switch (S804) signal input
13	VREF	I	Reference voltage input
14	XIN	I	Connect to the ceramic oscillator
15	XOUT	O	
16	GND	—	Connect to GND

Pin No.	Terminal Name	I/O	Function
17	VCC	I	Power supply (+5V)
18	RESET	I	Systen reset signal input
19	BACKUP	I	Power failure detect signal input
20	REMCON	I	Remote control signal input
21	BATLVL2	I	Not used, connect to GND
22	CS	I	Chip select signal input (Connect to GND)
23	MUTLED	O	Muting LED (D711) drive signal output
24	SRCELED	O	Source LED (D810) drive signal output
25	TP2MLED	O	Tape 2 LED (D811) drive signal output
26	TP1MLED	O	Tape 1 LED (D812) drive signal output
27	BATFLED	O	Not used, connect to GND
28	BATELED		
29	BATRLY		
30	CHRGRLY		
31	OPTRLY	O	Relay drive signal output
32	PWRRLY	O	Power control signal output

■ Schematic Diagram

Page

A MAIN CIRCUIT ..... 6~9

B TONE SWITCH CIRCUIT 7, 8

C VOLUME CIRCUIT 7

D BALANCE VR CIRCUIT 7

E POWER SWITCH CIRCUIT 7

F OPERATION CIRCUIT 7, 8

- **This schematic diagram may be modified at any time with the development of new technology.**

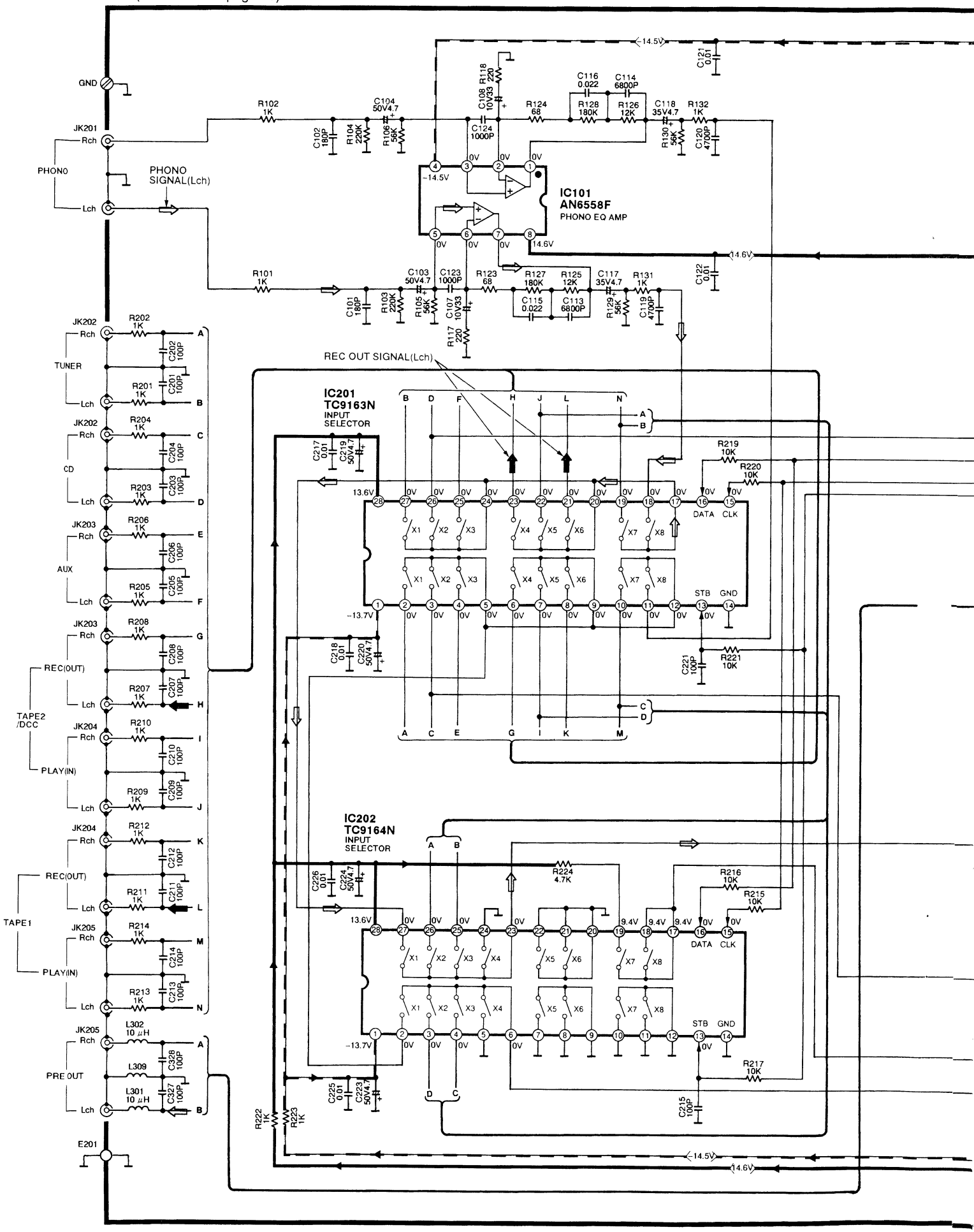
Notes:

- **S301** : Tone control switch (TONE ■:DEFEAT, ▬:ON)
- **S801** : Power "STANDBY ⏻ /ON" switch (POWER, STANDBY ⏻ /ON)
- **S802** : Tape monitor switch (TAPE MONITOR)
- **S804** : Input select switch (SELECTOR)
- **VR201** : Volume control VR (VOLUME)
- **VR202** : Balance control VR (BALANCE)
- **VR301** : Tone control VR (BASS)
- **VR302** : Tone control VR (TREBLE)
- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.
  No mark: Power ON
- Voltage and signal line

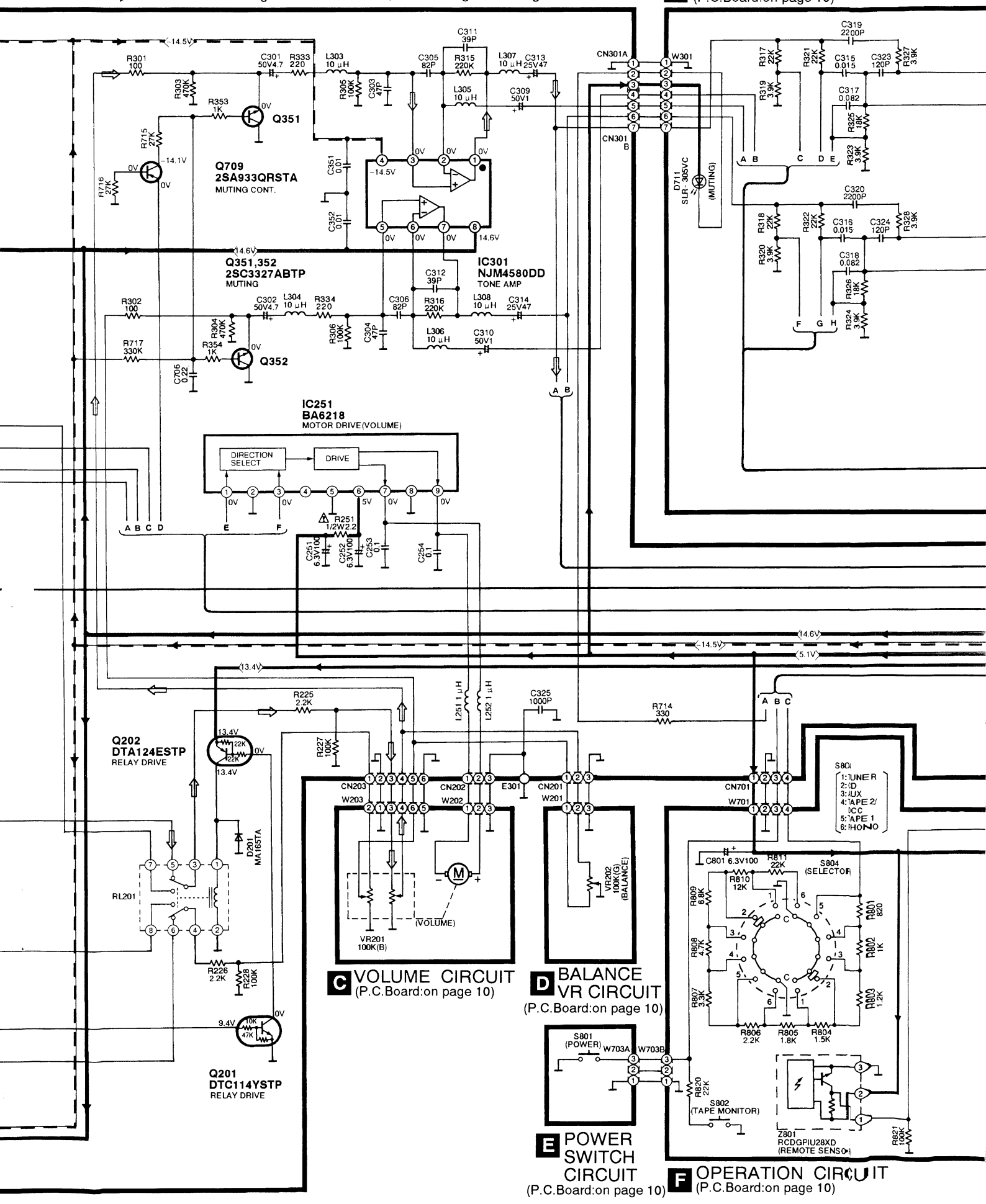
  ⇨ : Phono Signal (L-ch) Line
  ➡ : Rec Out Signal (L-ch) Line
  ——→—— : Positive Voltage Line
  - - -→- - - : Negative Voltage Line

- Important safety notice:
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.
- **Caution!**
  IC and LSI are sensitive to static electricity.
  Secondary trouble can be prevented by taking care during repair.
  Cover the parts boxes made of plastics with aluminum foil.
  Ground the soldering iron.
  Put a conductive mat on the work table.
  Do not touch the legs of IC or LSI with the fingers directly.

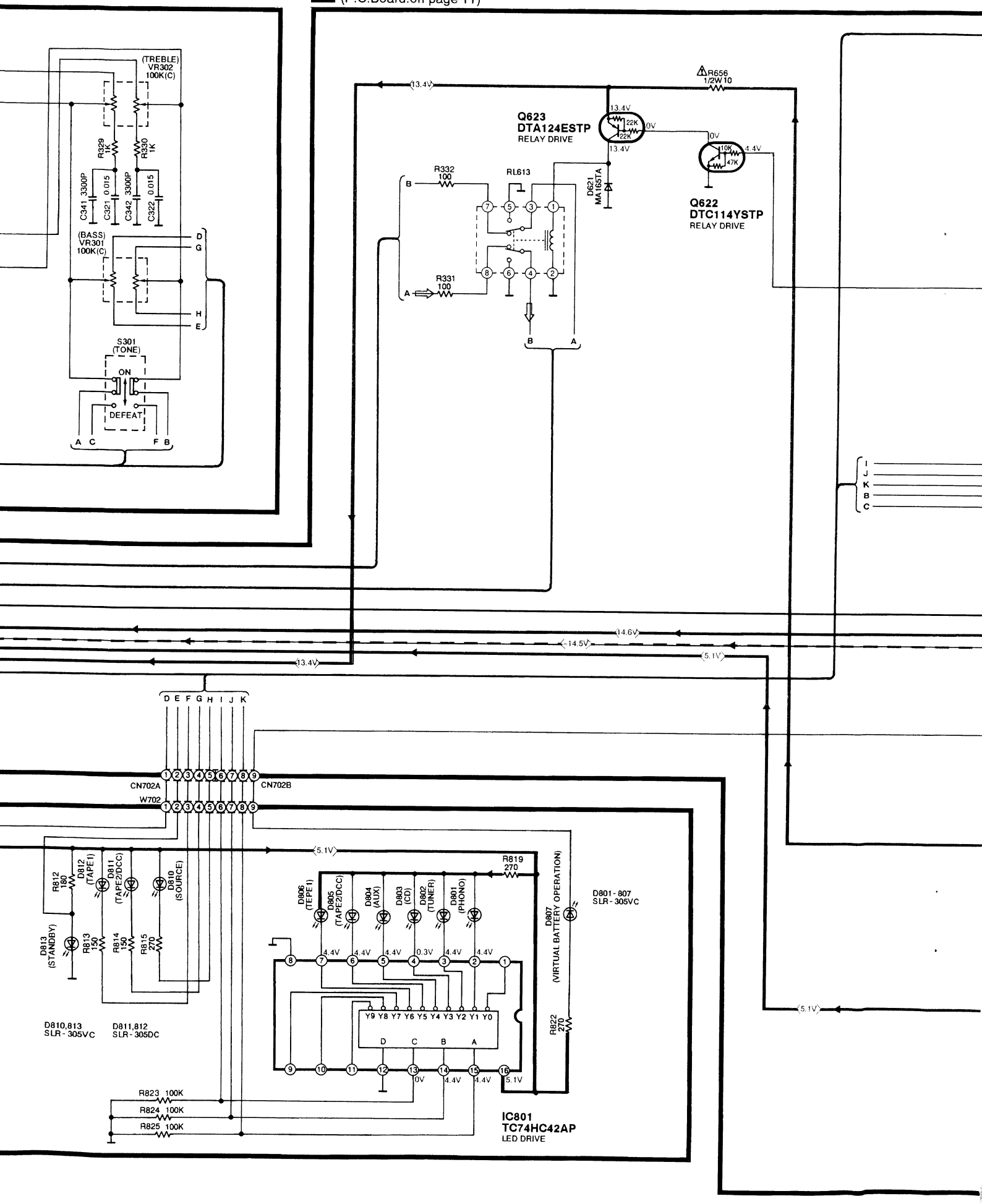
A MAIN CIRCUIT
(P.C.Board:on page 11)



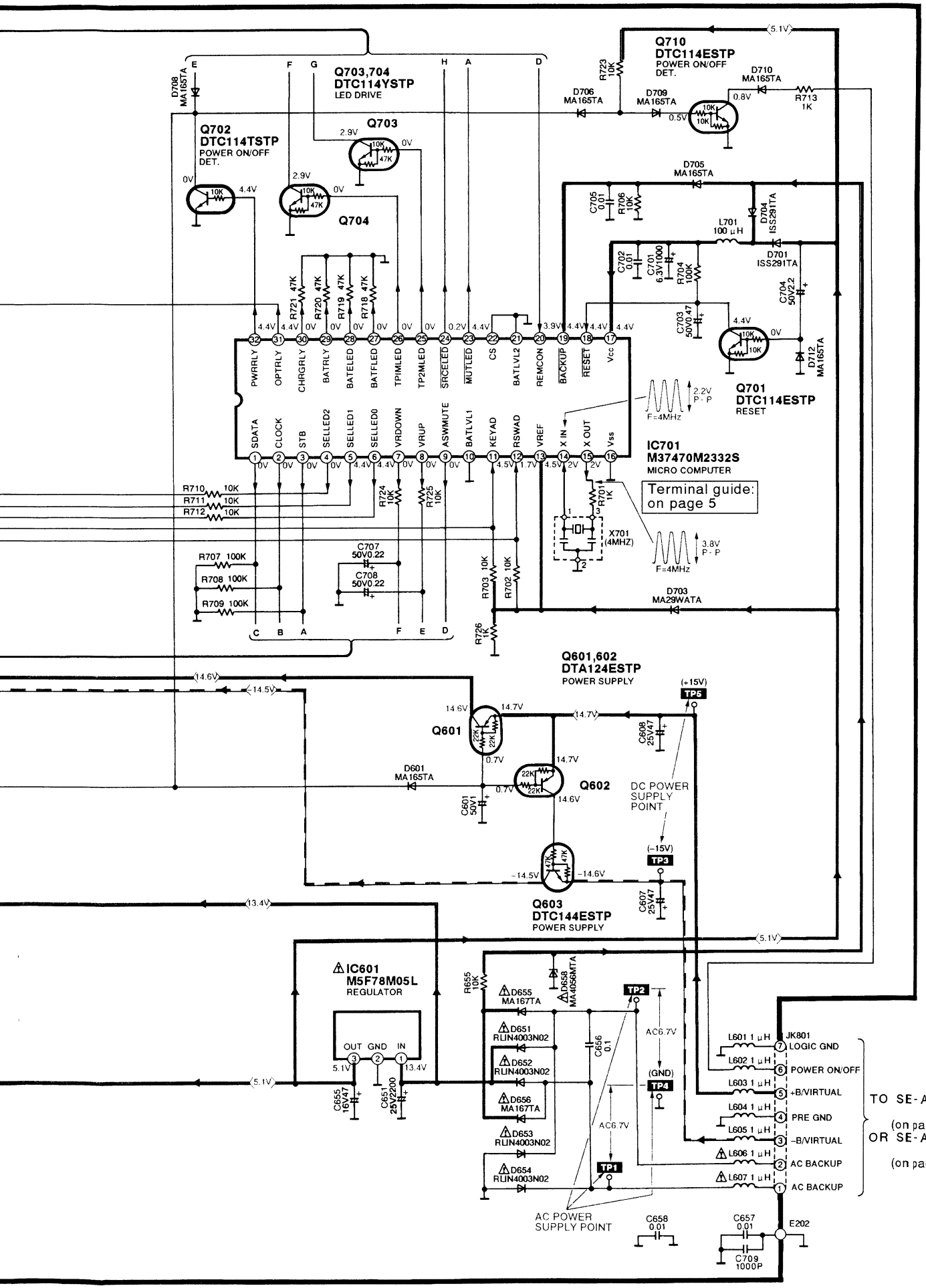
: Phono Signal (L-ch) Line
: Positive Voltage Line
: Rec Out Signal (L-ch) Line
: Negative Voltage Line



A MAIN CIRCUIT
(P.C.Board:on page 11)



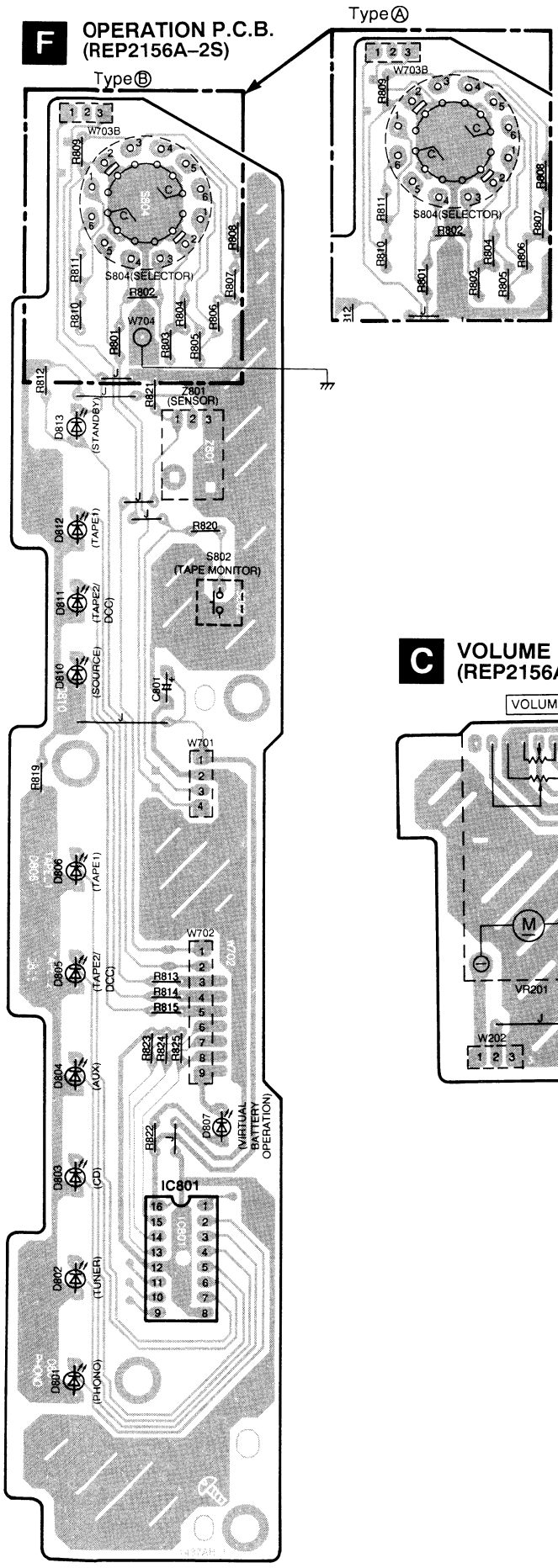
: Phono Signal (L-ch) Line
: Positive Voltage Line
: Rec Out Signal (L-ch) Line
: Negative Voltage Line



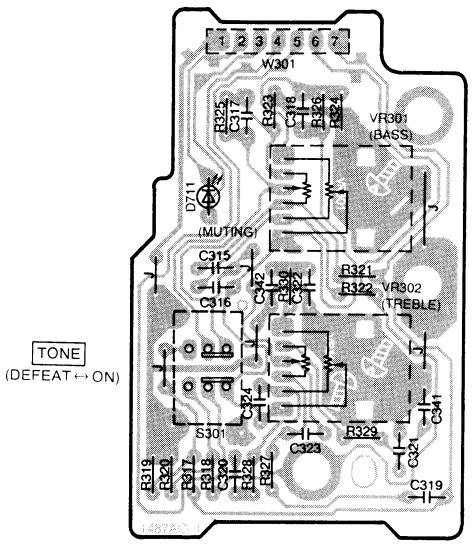
■ Printed Circuit Board Diagram

- This circuit board diagram may be modified at any time with the development of new technology.

F OPERATION P.C.B. (REP2156A–2S)

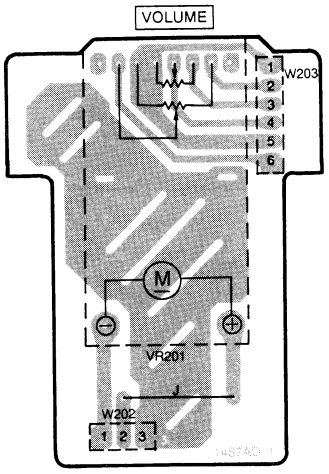


B TONE SWITCH P.C.B. (REP2156A–2S)

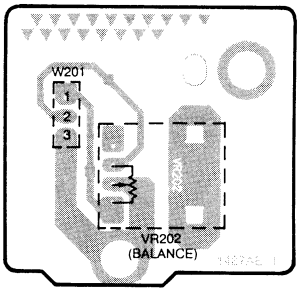


TONE (DEFEAT ↔ ON)

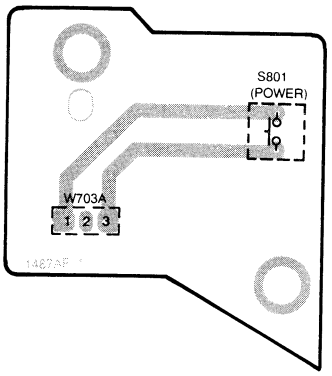
C VOLUME P.C.B. (REP2156A–2S)



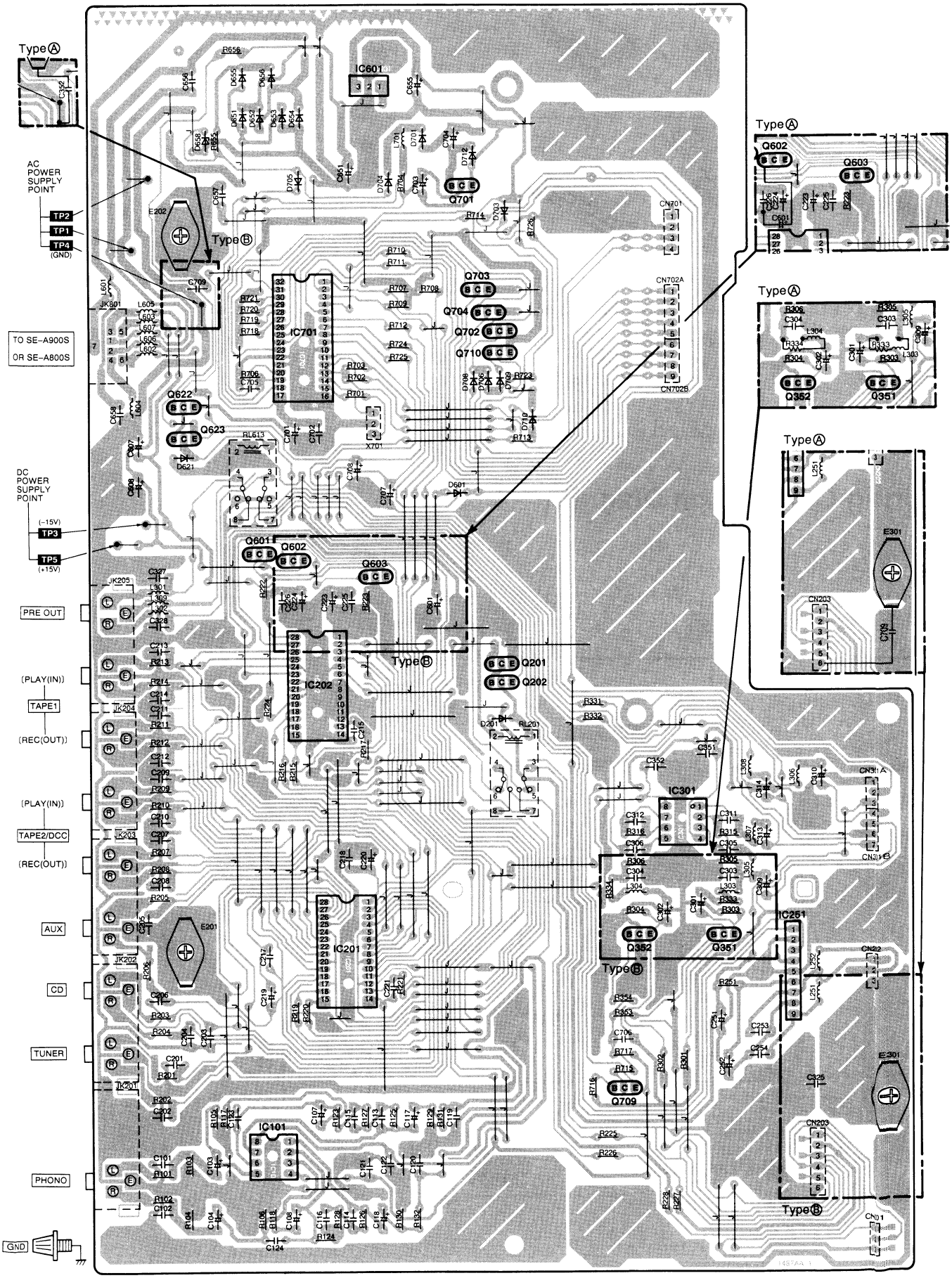
D BALANCE VR. P.C.B. (REP2156A–2S)



E POWER SWITCH P.C.B. (REP2156A–2S)



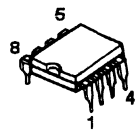
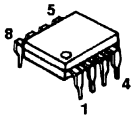
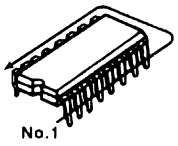
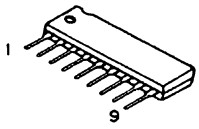
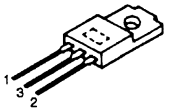
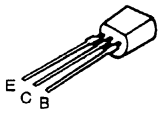
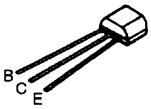
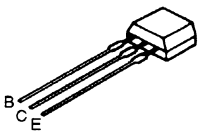
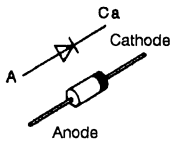
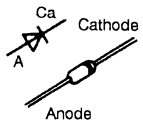
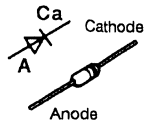
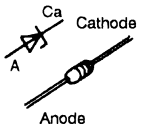
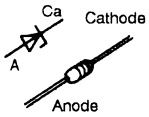
A MAIN P.C.B. (REP2156A–1S) [There are two kinds of Type(A),(B)in the Main P.C.B.]



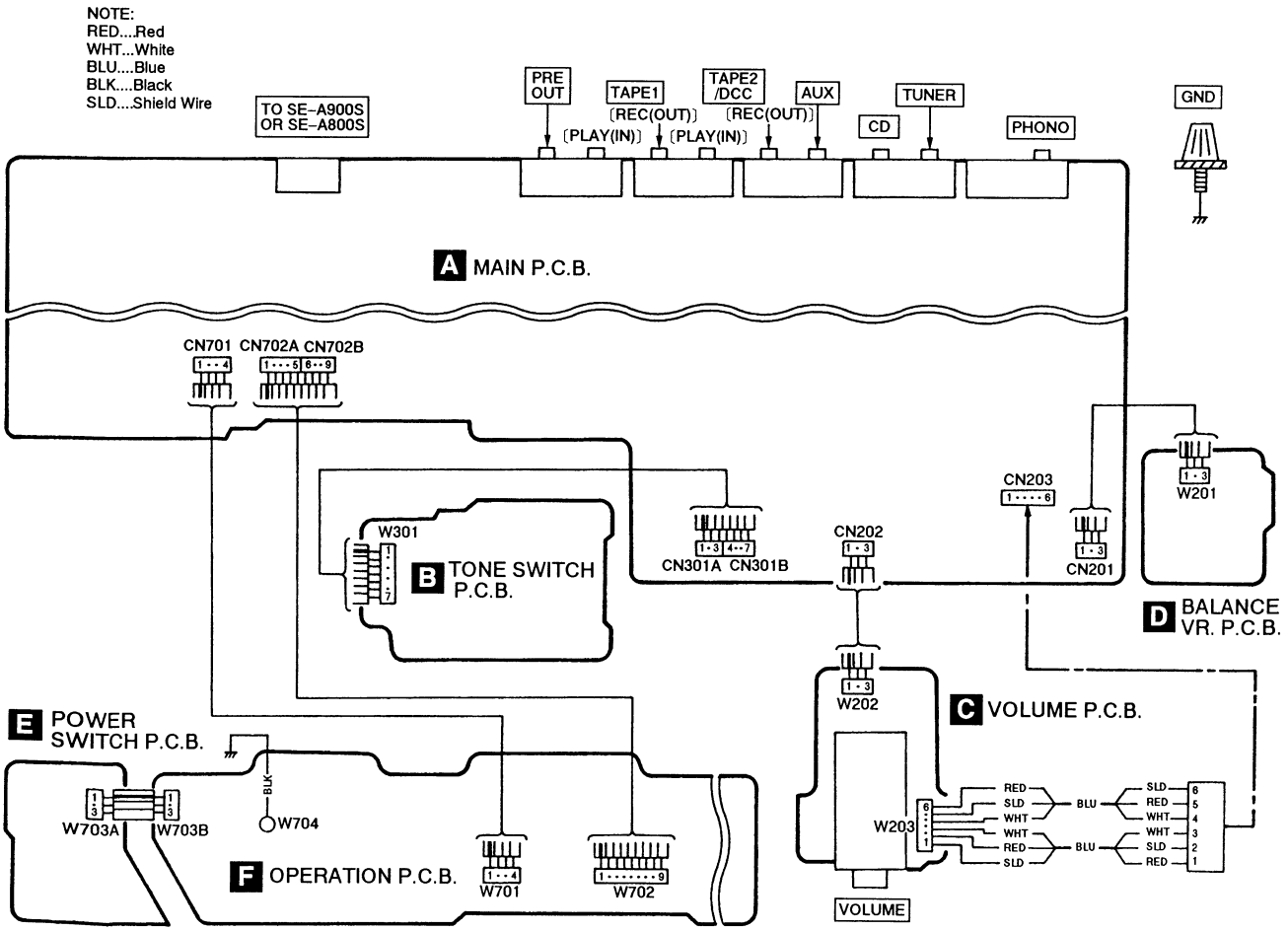
Notes:

Type (B) is different from Type (A) in part of the foil patterns and the parts.

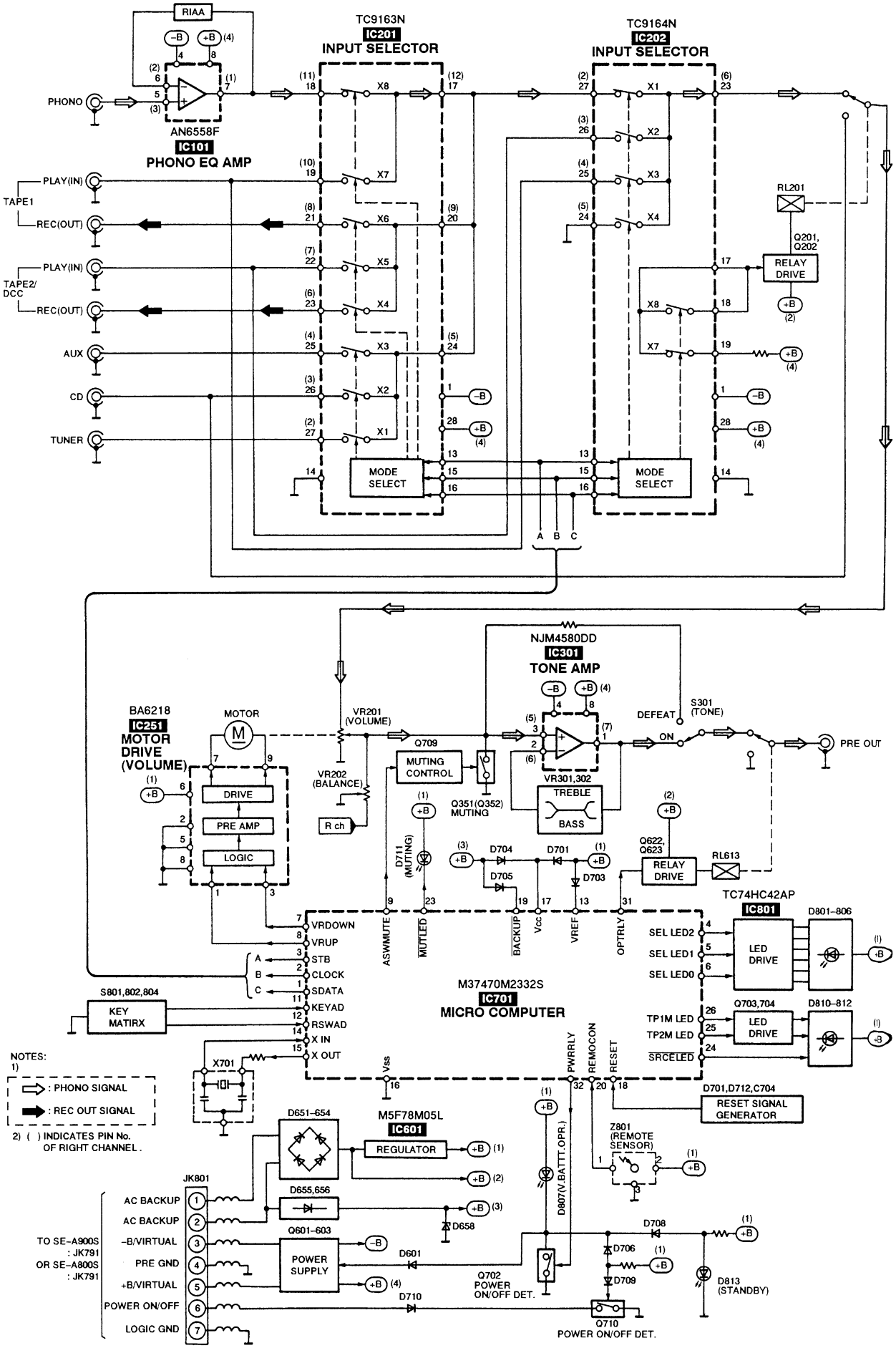
Repair the unit with attention to the differences.

AN6558F 	NJM4580DD 	 No.1	TC74HC42AP 16Pin TC9163N 28Pin TC9164N 28Pin M37470M2332S 32Pin	BA6218 	M5F78M05L 
2SA933QRSTA 	2SC3327-A 		DTA124ESTP DTC114ESTP DTC114TSTP DTC114YSTP DTC144ESTP	RL1N4003N02 	MA165 MA167 MA29WA 
1SS291TA 	MA4056MTA 	SLR-305DC SLR-305VC 			

■ Wiring Connection Diagram



■ Block Diagram



■ Replacement Parts List

Notes: *Important safety notice:
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
*The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)
Parts without these indications can be used for all areas.

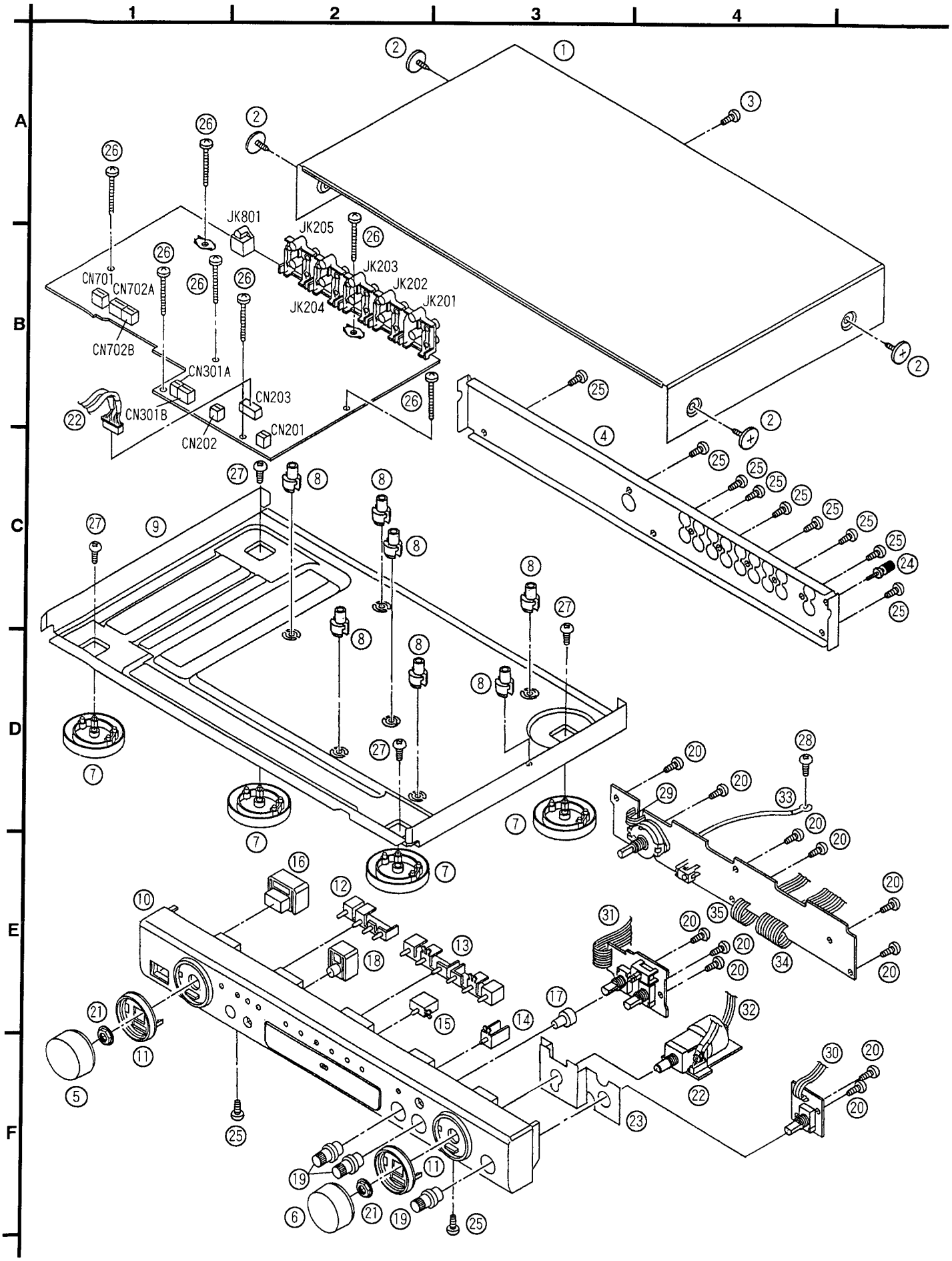
Ref. No.	Part No.	Part Name & Description	Remarks
		INTEGRATED CIRCUIT(S)	
IC101	AN6558F	IC, PHONO EQ AMP.	
IC201	TC9163N	IC, INPUT SELECTOR	
IC202	TC9164N	IC, INPUT SELECTOR	
IC251	BA6218	IC, MOTOR DRIVE	
IC301	NJM4580DD	IC, TONE AMP.	
IC601	M5F78M05L	IC, REGULATOR	⚠
IC701	M37470M2332S	IC, MICRO COMPUTER	
IC801	TC74HC42AP	IC, LED DRIVE	
		TRANSISTOR(S)	
Q201	DTC114YSTP	TRANSISTOR	
Q202	DTA124ESTP	TRANSISTOR	
Q351, 352	2SC3327-A	TRANSISTOR	
Q601, 602	DTA124ESTP	TRANSISTOR	
Q603	DTC144ESTP	TRANSISTOR	
Q622	DTC114YSTP	TRANSISTOR	
Q623	DTA124ESTP	TRANSISTOR	
Q701	DTC114ESTP	TRANSISTOR	
Q702	DTC114TSTP	TRANSISTOR	
Q703, 704	DTC114YSTP	TRANSISTOR	
Q709	2SA933QRSTA	TRANSISTOR	
Q710	DTC114ESTP	TRANSISTOR	
		DIODE(S)	
D201	MA165	DIODE	
D601	MA165	DIODE	
D621	MA165	DIODE	
D651-654	RL1N4003N02	DIODE	⚠
D655, 656	MA167	DIODE	⚠
D658	MA4056MTA	DIODE	⚠
D701	1SS291TA	DIODE	
D703	MA29WA	DIODE	
D704	1SS291TA	DIODE	
D705, 706	MA165	DIODE	
D708-710	MA165	DIODE	
D711	SLR-305VC	L. E. D.	
D712	MA165	DIODE	
D801-807	SLR-305VC	L. E. D.	
D810	SLR-305VC	L. E. D.	
D811, 812	SLR-305DC	L. E. D.	
D813	SLR-305VC	L. E. D.	

Ref. No.	Part No.	Part Name & Description	Remarks
		VARIABLE RESISTOR(S)	
VR201	EUWMGEF20B15	V. R, MAIN VOLUME	
VR202	EVJ02QF02G15	V. R, BALANCE	
VR301	EVJYA1F02C15	V. R, TONE CONTROL	
VR302	EVJYA1F02C15	V. R, TONE CONTROL	
		COMPONENT COMBINATION(S)	
Z801	RCDGP1U28XD	REMOTE SENSOR	
		COIL(S)	
L251, 252	ELEXT1R0KA9	COIL	
L301-308	ELEXT100KA9	COIL	
L309	BL02RN1R62T2	COIL	
L601-605	ELEXT1R0KA9	COIL	
L606, 607	ELEXT1R0KA9	COIL	⚠
L701	ELEXT101KA9	COIL	
		OSCILLATOR(S)	
X701	EF0GC4004A4	OSCILLATOR(4MHz)	
		SWITCH(ES)	
S301	ESB68047	SW, TONE(DEFEAT/ON)	
S801	EVQ21405R	SW, POWER(STANDBY/ON)	
S802	EVQ21405R	SW, TAPE MONITOR	
S804	RSR9A001-A	SW, SELECTOR	
		CONNECTOR(S)	
CN201, 202	RJS1A6603	CONNECTOR(3P)	
CN203	SJT3611	CONNECTOR(6P)	
CN301A	RJS1A6603	CONNECTOR(3P)	
CN301B	RJS1A6604	CONNECTOR(4P)	
CN701	RJS1A6604	CONNECTOR(4P)	
CN702A	RJS1A6605	CONNECTOR(5P)	
CN702B	RJS1A6604	CONNECTOR(4P)	
TP1-5	QJT1090	TEST POINT	
		EARTH TERMINAL	
E201, 202	SNE1004-2	GND PLATE	

Ref. No.	Part No.	Part Name & Description	Remarks
E301	SNE1004-2	GND PLATE	
		RELAY	
RL201	RSY0020M-R	RELAY	
RL613	RSY0020M-R	RELAY	
		JACK	
JK201	SJF3069-11N	TERMINAL, PHONO	
JK202	SJF3069N	TERMINAL, TUNER/CD	
JK203	SJF3069N	TERMINAL, AUX/TAPE2/DCC	
JK204	SJF3069N	TERMINAL, TAPE2/DCC/TAPE1	
JK205	SJF3069N	TERMINAL, TAPE1/PRE OUT	
JK801	RJS1D0706	SOCKET, SYSTEM	

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET PARTS	
1	RKM0032-K	CABINET	
2	RHD30035-K1	SCREW	
3	XTBS3+8JFZ1	SCREW	
4	RGR0224A-A	REAR PANEL	
5	RGW0229-K	KNOB	
6	RGW0230-K	KNOB, VOLUME	
7	RKA0053-A	FOOT	
8	RKQ0089	P. C. B. SUPPORT	
9	RMK0035-6	CHASSIS	
10	RFKGUC800UEK	FRONT PANEL ASS'Y	
11	RGK0747-S	ORNAMENT RING	
12	RGL0296-Q	PANEL LIGHT(A)	
13	RGL0297-Q	PANEL LIGHT(B)	
14	RGL0298-Q	PANEL LIGHT(C)	
15	RGL0299-Q	PANEL LIGHT(D)	
16	RGU0882-K	BUTTON, POWER	
17	RGU1207-K	BUTTON, TONE	
18	RGU1271-K	BUTTON, MONITOR	
19	RGW0205-K	BUTTON, BALANCE	
20	RHD26017	SCREW	
21	RHN90001	NUT	
22	REX0759	FLAT CABLE	
23	RSC0428-1	SHIELD PLATE	
24	SNE2123	SCREW	
25	XTBS3+8JFZ1	SCREW	
26	XTB3+20JFZ	SCREW	
27	XTB3+6G	SCREW	
28	XTB3+6JFZ	SCREW	
29	RWJ1803040KK	FLAT CABLE(3P) (W703)	
30	RWJ3903170KQ	FLAT CABLE(3P) (W201)	
31	RWJ3907170KQ	FLAT CABLE(7P) (W301)	
32	RWJ3903140KQ	FLAT CABLE(3P) (W202)	
33	REU38K120XX	WIRE ASS'Y(W704)	
34	RWJ1809180KX	FLAT CABLE(9P) (W702)	
35	RWJ1804180KX	FLAT CABLE(4P) (W701)	

■ Cabinet Parts Location



Notes : • Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads(F)
• Resistance values are in ohms, unless specified otherwise, 1K=1,000(OHM) , 1M=1,000k(OHM)

Ref. No.	Part No.	Values & Remarks
		RESISTORS
R101, 102	ERDS2TJ102	1/4W 1K
R103, 104	ERDS2TJ224T	1/4W 220K
R105, 106	ERDS2TJ563	1/4W 56K
R117, 118	ERDS2TJ221	1/4W 220
R123, 124	ERDS2TJ680T	1/4W 68
R125, 126	ERDS2TJ123	1/4W 12K
R127, 128	ERDS2TJ184T	1/4W 180K
R129, 130	ERDS2TJ563	1/4W 56K
R131, 132	ERDS2TJ102	1/4W 1K
R201-210	ERDAS3G102T	1/4W 1K
R211, 212	ERDS2TJ102	1/4W 1K
R213, 214	ERDAS3G102T	1/4W 1K
R215-217	ERDS2TJ103	1/4W 10K
R219-221	ERDS2TJ103	1/4W 10K
R222, 223	ERDS2TJ102	1/4W 1K
R224	ERDS2TJ472	1/4W 4.7K
R225, 226	ERDAS3G222T	1/4W 2.2K
R227, 228	ERDS2TJ104	1/4W 100K
R251 ⚠	ERDS1FVJ2R2T	1/2W 2.2
R301, 302	ERDAS3G101T	1/4W 100
R303, 304	ERDS2TJ474	1/4W 470K
R305, 306	ERDAS3G104	1/4W 100K
R315, 316	ERDS2TJ224T	1/4W 220K
R317, 318	ERDAS3G223T	1/4W 22K
R319, 320	ERDAS3G392T	1/4W 3.9K
R321, 322	ERDS2TJ223	1/4W 22K
R323, 324	ERDS2TJ392T	1/4W 3.9K
R325, 326	ERDS2TJ183T	1/4W 18K
R327, 328	ERDS2TJ392T	1/4W 3.9K
R329, 330	ERDS2TJ102	1/4W 1K
R331, 332	ERDAS3G101T	1/4W 100
R333, 334	ERDAS3G221T	1/4W 220
R353, 354	ERDS2TJ102	1/4W 1K
R655	ERDS2TJ103	1/4W 10K
R656 ⚠	ERDS1FVJ100T	1/2W 10
R701	ERDS2TJ102	1/4W 1K
R702, 703	ERDS2TJ103	1/4W 10K
R704	ERDS2TJ104	1/4W 100K
R706	ERDS2TJ103	1/4W 10K
R707-709	ERDS2TJ104	1/4W 100K
R710-712	ERDS2TJ103	1/4W 10K
R713	ERDS2TJ102	1/4W 1K
R714	ERDS2TJ331	1/4W 330
R715, 716	ERDS2TJ273	1/4W 27K
R717	ERDS2TJ334	1/4W 330K
R718-721	ERDS2TJ473	1/4W 47K
R723-725	ERDS2TJ103	1/4W 10K
R726	ERDS2TJ102	1/4W 1K
R801	ERDS2TJ821	1/4W 820
R802	ERDS2TJ102	1/4W 1K
R803	ERDS2TJ122	1/4W 1.2K
R804	ERDS2TJ152	1/4W 1.5K
R805	ERDS2TJ182	1/4W 1.8K
R806	ERDS2TJ222	1/4W 2.2K
R807	ERDS2TJ332	1/4W 3.3K
R808	ERDS2TJ472	1/4W 4.7K
R809	ERDS2TJ682T	1/4W 6.8K
R810	ERDS2TJ123	1/4W 12K
R811	ERDS2TJ223	1/4W 22K
R812	ERDS2TJ181T	1/4W 180
R813, 814	ERDS2TJ151	1/4W 150
R815	ERDS2TJ271	1/4W 270
R819	ERDS2TJ271	1/4W 270
R820	ERDS2TJ223	1/4W 22K
R821	ERDS2TJ104	1/4W 100K
R822	ERDS2TJ271	1/4W 270
R823-825	ERDS2TJ104	1/4W 100K
		CAPACITORS
C101, 102	ECBT1H181KB5	50V 180P
C103, 104	ECA1HPXS4R7B	50V 4.7U
C107, 108	RCE1AKA330BG	10V 33U
C113, 114	ECQB1H682JF3	50V 6800P
C115, 116	ECQB1H223JF3	50V 0.022U
C117, 118	ECEA1VKA4R7B	35V 4.7U
C119, 120	ECQB1H472JF3	50V 4700P
C121, 122	ECKR1H103ZF5	50V 0.01U
C123, 124	ECBT1H102KB5	50V 1000P
C201, 202	ECBT1H101KB5	50V 100P
C203, 204	ECKT1H101KB	50V 100P
C205-208	ECBT1H101KB5	50V 100P
C209, 210	ECKT1H101KB	50V 100P
C211, 212	ECBT1H101KB5	50V 100P
C213, 214	ECKT1H101KB	50V 100P
C215	ECBT1H101KB5	50V 100P
C217, 218	ECBT1E103ZF	25V 0.01U
C219, 220	RCE1HKA4R7BG	50V 4.7U
C221	ECBT1H101KB5	50V 100P
C223, 224	RCE1HKA4R7BG	50V 4.7U
C225, 226	ECBT1E103ZF	25V 0.01U
C251, 252	RCE0JKA101BV	6.3V 100U
C253, 254	ECQV1H104JM3	50V 0.1U
C301, 302	ECA1HPXS4R7B	50V 4.7U
C303, 304	ECCR1H470JC5	50V 47P
C305, 306	ECCR1H820JC5	50V 82P
C309, 310	ECA1HPXS010B	50V 1U
C311, 312	ECCR1H390JC5	50V 39P
C313, 314	ECA1EPX470TB	25V 47U
C315, 316	ECBT0J153MS5	6.3V 0.015U
C317, 318	ECQV1H823JM3	50V 0.082U
C319, 320	ECBT1C222KR5	16V 2200P
C321, 322	ECBT0J153MS5	6.3V 0.015U
C323, 324	ECBT1H121KB5	50V 120P
C325	ECBT1H102KB5	50V 1000P
C327, 328	ECKT1H101KB	50V 100P
C341, 342	ECBT1C332KR5	16V 3300P
C351, 352	ECKR1H103ZF5	50V 0.01U
C601	ECEA1HKA010B	50V 1U
C607, 608	ECA1EPXS470B	25V 47U
C651	ECA1EM222E	25V 2200U
C655	RCE1CKA470BG	16V 47U
C656	ECQV1H104JM3	50V 0.1U
C657, 658	ECKR1H103ZF5	50V 0.01U
C701	ECA0JM102B	6.3V 1000U
C702	ECBT1C103NS5	16V 0.01U
C703	RCE1HKAR47BG	50V 0.47U
C704	ECEA1HKA2R2B	50V 2.2U
C705	ECBT1C103NS5	16V 0.01U
C706	ECQV1H224JM3	50V 0.22U
C707, 708	ECEA1HKAR22B	50V 0.22U
C709	ECBT1H102KB5	50V 1000P
C801	RCE0JKA101BV	6.3V 100U

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